### Former National Guard Armory Hobart, Oklahoma

### **Remediation Final Report**



Prepared by:
Department of Environmental Quality
707 North Robinson
Oklahoma City, Oklahoma 73101



# The Oklahoma Department of Environmental Quality (DEQ) is pleased to present Kiowa County with the Final Remediation Report for the former Hobart Armory.



### **DEED NOTICE**

A Notice of Remediation has been filed in the county courthouse and is included in this report. It summarizes remediation performed at the former Hobart Armory and describes continuing operation, maintenance and land use restrictions. This completes the DEQ cleanup of the property. For more detail on the activities described below, see enclosed reports.

### **ASBESTOS REMEDIATION**

DEQ and its contractors completed the following activities:

- Asbestos inspection, including:
   Asbestos containing pipe wrap, drywall joint compound, floor tile mastic and roof panels
- Asbestos Abatement, including:

   Removal and replacement of pipe wrap.

   Removal of floor tile mastic and drywall joint compound.

### TARGETED BROWNFIELD ASSESSMENT

In October 2011, DEQ provided a Phase I Targeted Brownfield Assessment to Kiowa County.

A copy of this report is available at:

http://www.deq.state.ok.us/lpdnew/scapIndex.htm

### **LEAD REMEDIATION**

DEQ and its contractors completed the following activities:

Lead-based paint (LBP) inspection

Lead dust wipe sampling

LBP abatement, including:

Scraping and sealing walls and other non-friction surfaces containing LBP

Removal and replacement of doors and windows containing LBP Lead dust abatement, including:

HEPA vacuuming and wet washing of floors in the building Proper disposal of associated waste





1	Deeds and Legal Documents	
2	Maintenance Plan	
3	Inspection Reports	
4	Scope of Work	
5	Final Abatement Reports	
6	Confirmation Sampling	

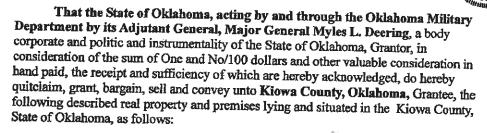
### **Deeds and Legal Documents**

Numerical

I-2011-000961 Book 0765 Pg: 889 05/23/2011 11:45 am Pg 0889-0890 Fee: \$15.00 Doc: \$0.00 Geenes Watson - Klova County Clerk State of Oldshoms

#### QUITCLAIM DEED

#### KNOW ALL MEN BY THESE PRESENTS:



A tract of land located in the South Half (S. ½) of the Southeast Quarter (SE ¼) of the Southwest Quarter (SW ¼) of Sec. 34, Twp. 7 North, Range Eighteen (18) West of the Indian Meridian, more particularly described by metes and bounds as follows:

Beginning at a point Eight Hundred Twenty-one (821) feet east and Twenty-two (22) feet north of the southwest corner of the Southeast Quarter (SE ¼) of the Southwest Quarter (SW ¼) of Section Thirty-four (34), Township Seven (7) North, Range Eighteen (18) West of the Indian Meridian, said point of beginning being Thirty-one (31) feet east and Eighty-two (82) feet north of the northeast corner of Block Two (2) in the Original Townsite of Hobart, Oklahoma; thence north normal to the said Original Townsite of Hobart, Oklahoma, a distance of Four Hundred (400) feet; thence west a distance of Two Hundred Twenty (220) feet; thence south a distance of Four Hundred (400) feet; thence east a distance of Two Hundred Twenty (220) feet to the point of beginning,

together with the improvements thereon and appurtenances thereunto belonging.

NOTICE: THE ABOVE DESCRIBED PROPERTY MAY HAVE BEEN CONTAMINATED WITH LEAD, ASBESTOS AND OTHER CONTAMINANTS.

TO HAVE AND TO HOLD unto the Grantee, its successors, and assigns for so long as said real property is used for a public purpose as required for this transfer in accordance with title 44, section 233.3(B) of the Oklahoma Statutes.

Signed and delivered this 17 day of Many 2011.

I-2011-000961 Book 0765 Pg: 890 05/23/2011 11:45 am Pg 0889-0890 Fee: \$15.00 Doc: \$0.00 Geanea Watson - Klowa County Clerk State of Oklahoma

STATE OF OKLAHOMA

By:

Major General Myles L. Deering, Adjutant General of the State of Oklahoma

#### ACKNOWLEDGMENT

STATE OF OKLAHOMA )		91	
COUNTY OF OKLAHOMA)			
Before me, Tammy He this 12 day of The Deering, as Adjutant General of the person who executed the within and that he executed the same as free an therein set forth.	d voluntary act a	tim Deed and ackno	ouvledged to me
My Commission Expires:			
My Commission of the commissio			
The second of th	RETURN TO: Lunder OK VIII 350( II OK.C, C	Coeloin Handoot Ailitangere	ીવ

I-2013-000004 Book 0780 Pg: 92 01/02/2013 8:00 am Pg 0092-0094 \$ 0.00 Doc: \$ 0.00 Watson - Klowa County Clerk State of Oklahoma Geanea Watson -

9970AN 04 2013

NOTICE OF REMEDIATION LANDPROTECTION DIVISION FORMER HOBART ARMORY DEPARTMENT OF EAUTRONMENTAL QUALITY HOBART, OKLAHOMA



LEGAL BASIS FOR NOTICE: The Oklahoma Department of Environmental Quality (DEQ) hereby files this Notice of Remediation pursuant to Oklahoma Statutes, 27A § 2-7-123 (C). This Notice does not grant any right to any person not already allowed by law and shall not be construed to authorize or encourage any person or other legal entity to cause or increase pollution, to avoid compliance with state or federal laws and regulations regarding pollution or to escape responsibility for maintaining environmentally sound operations.

The DEQ may take administrative or civil action to recover costs or to compel compliance with the Land Use Restrictions and to prevent damage to or interference with the Engineering Controls and Continuing Operation, Maintenance of said Engineering Controls herein described.

The Land Use Restrictions, Engineering Controls and Continuing Operation, Maintenance of said Engineering Controls shall apply to the Affected Property and to persons who own and/or use the Affected Property until such time as the DEQ files a subsequent Notice of Remediation that changes or removes one or more of them. Activities that cause or could cause damage to the Remedy or the Engineering Controls or recontamination of soil or groundwater are prohibited.

REASON FOR NOTICE: The below described Affected Property was contaminated with materials that required remediation pursuant to state and federal environmental laws and regulations. Sampling performed by DEQ contractors, conducted on August 24, 2011; indicated that there was asbestos, lead-based paint, and lead dust in the building. Burgo a Treat continue continue con Bur

AFFECTED PROPERTY: The Affected Property is the former Hobart Armory located at 217 N Lincoln S, Hobart, Kiowa County, Oklahoma 73651.

The legal description is as follows:

A tract of land located in the South Half (S. 1/2) of the Southeast Quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Sec. 34, Twp. 7 North, Range Eighteen (18) West of the Indian Meridian, more particularly described by metes and bounds as follows:

Beginning at a point Eight Hundred Twenty-one (821) feet east and Twenty-two (22) feet north of the southwest corner of the Southeast Quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Section Thirty-four (34), Township Seven (7) North, Range Eighteen (18) West of the Indian Meridian, said point of beginning being Thirty-one (31) feet east and Eighty-two (82) feet north of the northeast corner of Block Two (2) in the Original Townsite of Hobart, Oklahoma; thence north normal to the said Original Townsite of Hobart, Oklahoma, a distance of Four Hundred (400) feet; thence west a distance of Two Hundred Twenty (220) feet; thence south a distance of Four Hundred (400) feet; thence east a distance of Two Hundred Twenty (220) feet to the point of beginning, together with the improvements thereon and appurtenances thereunto belonging. र्वेन भी भी तो तो के बो क्षित हो। है । २ ५,७५ इंगड़ (च्योड़िक्स कर

REMEDY: Remediation activities (Remedy) at the Affected Property included abatement of asbestos, lead-based paint and dust. The remedy was completed on August 31, 2012.

I-2013-000004 Book 0780 Pg; 93 01/02/2013 8:00 am Pg 0092-0094 Fee: \$ 0.00 Doc: \$ 0.00 Geanea Watson - Klowa County Clerk State of Oklahoma

For more detailed information please refer to Former National Guard Armory Hobart, Oklahoma Remediation Final Report. To obtain a copy of the report, contact:

Oklahoma Department of Environmental Quality Central Records

Mailing Address
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Physical Address 707 N Robinson Oklahoma City, OK 73102

Electronic Address
http://www.deq.state.ok.us/lpdnew/scapIndex.htm

#### DISCLAIMER

- (A) Lead: DEQ did not test every painted surface inside and outside of the building, therefore there is a potential for lead-based paint at the affected property.
- (B) Asbestos: DEQ did not test all building materials inside and outside of the building, therefore there is a potential for asbestos at the affected property.

#### CONTINUING OPERATION, MAINTENANCE AND MONITORING

(A) Lead-based paint encapsulant: Lead-based paint encapsulant was applied over lead-based paint on non-friction surfaces. These areas should be periodically inspected and maintained as appropriate.

LAND USE RESTRICTIONS: The land use restrictions at the above-described Affected Property are:

a. No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours within one twenty four (24) hour period.

These land use restrictions apply to the entirety of the Affected Property described herein above.

CHANGING LAND USE RESTRICTIONS: Changes to land use restrictions must be approved by the DEQ or its successor agency. The person requesting the change in land use must demonstrate to the DEQ's satisfaction that contamination at the site has reached levels appropriate for the proposed new land uses and that further remediation is not necessary or that additional institutional or engineering controls are adequate to achieve levels protective of human health and the environment for the proposed uses.

The DEQ may require oversight costs, work plans, sampling, reports, and public participation as part of its review of the new information to support the requested change in land use restrictions. The person requesting the change will be required to follow agency procedures effective at the time of the request.

1-2013-000004 Bóók 0780 Pg: 94 01/02/2013 8:00 am Pg 0092-0094 Geanea Watson - Klowa County Clerk State of Oklahoma

The DEQ at its discretion may determine, based on the new information submitted, that contaminants are present at the Site at levels that will not pose a risk to human health or the environment if the new land use restrictions being requested are allowed. Upon making this determination, the DEQ will file a recordable notice of remediation pursuant to state law in the land records in the in the office of the county clerk where the Site is located designating the new land use restrictions.

This Notice of Remediation and the restrictions and requirements contained herein run with the land and no change of ownership of the Affected Property will change the Land Use Restrictions.

Steven A. Thompson, Executive Director

Oklahoma Department of Environmental Quality

STATE OF OKLAHOMA COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 26 Septemba, 2012, personally appeared Steven A. Thompson to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that executed the same as free and voluntary act and deed for the uses and purposed therein set forth.

ACKNOWLEDGMENT

In Testimony Whereof, I have hereunto set my hand and official seal the day and year above written.

### Maintenance Plan

### MAINTENANCE PLAN FORMER HOBART ARMORY HOBART, OKLAHOMA

The Armory located at 217 North Lincoln Street, Hobart, Oklahoma, was contaminated with materials that required remediation pursuant to State and Federal environmental laws and regulations. Please refer to Attachment 1 for land use restrictions. Sampling performed by DEQ contractors, conducted on August 24, 2011, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Affected Property included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on August 31, 2012. The following maintenance plan is to be completed by the owner of the Affected Property. DEQ recommends inspection of remediated areas every 5 years. During site inspections the owner should note any signs of disrepair or improper maintenance. Continuing operation, maintenance and monitoring should include:

- 1. All overhead door frames and guards were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking.
- 2. All walls and ceilings in Rooms 2, 6, and 20 were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking. See Attachment 2 for Hobart Armory Floor Plan Map.
- 3. All interior and exterior door and window lintels, and all wood window trim and window sills located in Rooms 1, 2, 6, and 20 were scraped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking. See Attachment 2 for Hobart Armory Floor Plan Map.
- 4. The painted brick wall in Room 3, the wood beams above windows in Room 1, and the door frame and door lintel located between Room 1 and Room 2 were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be reencapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking. See Attachment 2 for Hobart Armory Floor Plan Map.

Note — A list of DEQ approved acrylic sealant and elastomeric encapsulants is attached (Attachment 3). DEQ did not test every painted surface and all building materials inside and outside of the building, therefore there is a potential for lead-based paint and asbestos at the affected property.

If you have any questions or concerns feel free to contact me at (405) 702-5115.

Sincerely,

**Dustin Davidson** 

Dustin Davidson

Environmental Programs Specialist DEQ Land Protection Division

Site Cleanup Assistance Program

### **ATTACHMENT 1**

### Land use Restrictions

LAND USE RESTRICTIONS: The land use restrictions at the above-described Affected Property are:

a. No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours a day in excess of 30 days per year.

These land use restrictions apply to the entirety of the Affected Property described herein above.

### **ATTACHMENT 2**

### **Hobart Armory Floor Plan Map**

## HOBART ARMORY FLOOR PLAN

Room 3	Room Room 5 20 Room 2	Room 1
		Room 3

### **ATTACHMENT 3**

### **DEQ Approved Sealants and Encapsulants List**

### Acrylic Sealant approved by DEQ

### KM-669 Acrylic

### Lead-Based Paint Encapsulants approved by DEQ

Encapsulant Manufacturer Product(s)	Encapsulant
Coronado Paint Company	LEAD BLOCK <sup>TM</sup>
Dumond Chemicals	LEAD STOP <sup>TM</sup>
Dynacraft Industries, Inc.	Back to Nature Protect-A-Coat
Encap Systems Corporation	EncapSeal <sup>TM</sup> I
Encap Systems Corporation	EncapSeal <sup>TM</sup> II
Fiberlock Technologies, Inc.	Child GUARD interior/exterior
Fiberlock Technologies, Inc.	L-B-C® Type III
Global Encasement, Inc.	LeadLock <sup>TM</sup>
Grace Construction Products	Lead Seal®
Grace Construction Products	Barrier Coat® II
Insl-x Products Corporation	$INSL$ - $CAP^{TM}$
SAFE Encasement Systems	SE-120 Protective Skin
Specification Chemicals, Inc.	NU-WAL® #2500 Coating

### **Inspection Reports**

### SURVEY AND ASSESSMENT FOR LEAD IN PAINT AND SETTLED DUST

NATIONAL GUARD ARMORY 217 NORTH LINCOLN STREET HOBART, OKLAHOMA 73651

ENERCON Project Number ENMISC2393
August 24, 2011

Oklahoma Department of Environmental Quality
Land Protection Division
PO Box 1677
Oklahoma City, Oklahoma 73101-1677
Attention: Mr. Dustin Davidson

### EJENERCON

Encellence—Every project. Every days
Enercon Services, Inc.
6525 North Meridian Avenue, Suite 400
Oklahoma City, Oklahoma 73116
Phone: (405) 722-7693

rnone: (405) 722-7693 Fax: (405) 722-7694

Prepared By:

Marshall L. Branscum Environmental Scientist

LBP Inspector, OKINSR13415

OKRASR11260

Reviewed By:

Emmett W. Muenker Senior Project Manager LBP Risk Assessor,

#### TABLE OF CONTENTS

SECI	ION	PAGE
1.0 2.0 3.0 3.1 3.2	MET RESU	E SUMMARY
		APPENDICES
Append	ix A	Building Layouts with LBP and Lead Dust Contamination Locations
Append	ix B	Photographic Record of Representative Building Components with LBP
Append	ix C	Dust Wipe Laboratory Report and Chain of Custody
Append	ix D	XRF Data Spreadsheets
Appendi	ix E	XRF Performance Characteristics Sheets
Appendi	хF	Lead-Based Paint Inspector, Risk Assessor, and Firm Licenses



#### EXECUTIVE SUMMARY

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Hobart National Guard Armory, 217 North Lincoln Street, Hobart, Oklahoma. The survey was conducted on July 19, 2011 by Mr. Marshall Branscum and Mr. Richard Belcher, both of ENERCON.

The Survey and Assessment included non-destructive sampling of representative paint surfaces in the armory using an X-ray Fluorescence (XRF) Analyzer and dust wipe samples. Dust wipe samples were collected from the floor in each room using EPA/HUD wipe sampling protocols.

The results of XRF sampling indicated the following:

- Interior: Nine high bay windows in Room 1, six lower windows in Rooms 2, 6, and 20; the sliding metal door and lintel between Room 1 and Room 2; the door frame in Room 2 and the door track in Room1 associated with the sliding door; the walls, baseboards, window sills/trim, wood trim and roof deck in Rooms 2, 6, and 20; the metal roof-support trusses in Room 1 and roof-support I-beams in Rooms 2, 6, and 20; the door and door frame in Room 20; the door frame Room 2; the brick wall in Room 3; and wooden beams located above the high bay windows on the north and south sides of Room 1 were coated with LBP.
- Exterior: Two beige door and door frames, twenty-one lintels, eight modified bollards and sixteen wall edge protectors at four roll-up doors were coated with LBP.

The results of wipe samples collected from the floors revealed:

Lead contamination above 40 μg/ft² was present in seven rooms: Rooms 1, 2, 3, 6, 15, 16 and 20.



#### 1.0 INTRODUCTION

Enercon Services, Inc. (ENERCON) has completed a Survey and Assessment for Lead in Paint and Settled Dust (Survey) at the Hobart National Guard Armory, 217 North Lincoln Street, Hobart, Oklahoma. The inspection was conducted on July 19, 2011 by Mr. Marshall Branscum and Mr. Richard Belcher, both of ENERCON.

The Hobart National Guard Armory was constructed on a concrete slab-on-grade foundation with flat roofs covered with tar and gravel over the office area and the three rooms to the west of the drill room, with a pitched corrugated Transite roof above the drill room. The walls were constructed of brick and concrete block. The building contained a large drill room with offices and other rooms located south of the drill room along a central corridor and three rooms located west of the drill room. Layouts are included in Appendix A.

The Survey was performed to identify the locations, condition and estimated quantities of Lead-Based Paint (LBP) and lead-laden settled dust in the Armory.

#### 2.0 METHODOLOGY

The survey included visual observations, photographic documentation (Appendix B), dust wipe samples (Appendix C), and x-ray fluorescence (XRF) measurements of suspect Lead-Based Paint (LBP) (Appendix D). A visual inspection was performed in all rooms and the exterior of the building. The purpose of the visual inspection was to identify similarly painted surfaces so that representative XRF measurements could be made. These surfaces were determined by differentiating them by color, component and room. XRF measurements were then obtained for each building component type in each room and on each side of the building exterior. The criterion used for determination of the presence of LBP on painted surfaces was the EPA threshold for XRF readings as equal to or greater than 1.0 milligram per square centimeter (mg/cm²).

One dust wipe sample was obtained in each room except for the drill room, where three samples were obtained, and in the corridor, where two samples were collected. The criterion used for dust wipe samples based upon sampling according the the EPA/HUD criteria for wipe samples and laboratory analysis where the lead concentration is equal to or greater than 40.0 micrograms per square foot ( $\mu$ g/ft<sup>2</sup>).

The presence of LBP was determined using a Niton Model XLp-703A XRF (X-Ray Fluorescence) Analyzer, Serial Number 24295. At power-up, the unit performed routine internal calibration and operational checks. It was then checked for reading accuracy using a 1.0 mg/cm<sup>2</sup> standard paint chip supplied by the manufacturer by a series of three measurements of the standard paint chip. This calibration was done immediately prior to use, at least every four hours of operation and prior to shut down each day of use. The Performance Characteristic Sheet for the XLp-703A is provided in Appendix E of this



report. The location, component, substrate, color and other relevant information regarding the sample was entered into the XRF using the touchpad on the instrument as each measurement was made. Upon completion of the measurements, the data was downloaded into an Excel spreadsheet using software provided by the analyzer manufacturer. The Excel spreadsheet is provided in Appendix D of this report. Some corrections of the downloaded data were made due to obvious keypad entry errors. Due to the sensitivity of the proximity sensor on the XRF, a number of null readings resulted, particularly when attempting to sample rough or uneven painted surfaces. These readings were not deleted from the spreadsheet in order to maintain the continuity of the sample numbers.

Each room was given an arbitrary number on a building floor plan. The sides of the rooms and the building exterior were designated by letters with street address side labeled as "Side A," and the remaining sides denoted as B, C and D following a clockwise pattern.

The actual number of XRF measurements completed was dependent upon the different painted components and colors of paint present. The XRF instrument measures all layers of paint present at the sampling location. Therefore, the XRF instrument returns a positive reading even through layers of non-lead paint that have been applied when a layer of LBP exists on the component.

The condition of painted surfaces was recorded during the survey and is discussed in the Results Section below.

#### 3.0 RESULTS

#### 3.1 Lead-Based Paint

A total of 279 XRF samples were collected, including calibration and null readings. Figure 1 in Appendix A shows the location of the components with LBP. Table 1 shows the location and size of doors/door frames that tested positive for LBP. Table 2 lists the windows/window frames that tested positive by XRF and Table 2A lists the total number of windows by size and location, both those tested by XRF and those not tested but have same finish as those tested. Table 3 provides a summary of building components with LBP as identified by XRF sampling along with their locations and sizes. The location and number of components are shown on the layouts in Appendix A. It should be noted, that although the nine high bay windows/window frames in Room 1 and the six lower windows/window frames in Rooms 2, 6 and 20 are included with the interior components, the exterior of these windows/window frames are also coated with LBP. The painted surfaces sampled during the survey ranged from intact to poor condition. Representative photographs were taken of components where positive readings (1.0 mg/cm² or greater) were obtained and are provided in Appendix B.

The results of XRF sampling indicated the following building components were coated with LBP:



#### Interior Components:

- Nine high bay windows, Room 1
- Six lower windows, Rooms 2, 6, and 20
- Metal lintel, above doorway between Room 1 and 2
- Roof deck, Rooms 2, 6, and 20
- Wood beams above high bay windows, Room 1
- Metal roof trusses, Room I
- Metal roof-support I-beams, Rooms 2, 6, and 20
- Walls, baseboards, window sills and wood trim, Rooms 2, 6, and 20
- Door frame, Room 2
- Sliding door, between Rooms 1 and 2
- Sliding door track, Room 1
- Door and door frame, Room 20
- Brick wall, Room 3

#### **Exterior Components:**

- Two beige doors and door frames, Sides A and C
- Twenty-one lintels above doors and windows, Sides A, B, C and D
- Eight modified bollards and sixteen wall edge protectors at four roll-up doors, Sides A and B

Table 1 - Lead-Based Paint Locations (XRF)
Doors and Door Frames

Identified Lead- Based Paint (Color/Description)	Lead Content (mg/cm²)	Location	Size of Doo:/Frame
Beige/Door	1.3	Exterior, Side A	36" x 84"
Beige/Door Frame	2.8	Exterior, Side A	36" x 84"
Beige/Door	1.2	Exterior, Side C	72" x 80"
Beige/Door Frame	1.7	Exterior, Side C	72" x 80"
Red/Door	13.1	Room 1, Side C	75" x 96"
Black/Door Frame	2.8	Room 2, Side A	70" x 90"
Green/Door	2.6	Room 20, Side B	30" x 80"
Red/Door Frame	4.4	Room 20, Side B	30" x 80"

Table 2 - Lead-Based Paint Locations (XRF) Windows and Window Frames

	TIMUUWS AL	IC AMERICA LLHUGS	4.4
Identified Lead- Based Paint (Color/Description)	Lead Content (mg/cm²)	Location	Size of Windows
Beige/Window Frame	2.7	Exterior, Side C	42" x 36"
Beige/Window Frame	2.0	Exterior, Side C	42" x 36"
Beige/Window Frame	1.7	Exterior, Side D	42" x 36"
Beige/Window Frame	3.1	Exterior, Side D	42" x 36"
Brown/High Bay Window Frame	2.0	Room 1, Side B	42" x 36"
Brown/High Bay Window Frame	2.0	Room 1, Side B	42" x 36"
Brown/High Bay Window Frame	3.5	Room 1, Side D	42" x 36"

NOTE: Table 2 includes only windows tested positive by XRF..

Table 2A - Total Windows/Window Frames with Lead-Resed Paint

Identified Lead- Based Paint (Color/Description)	Number of Windows	Location	Size of Windows
Beige/Window Frame	4	Rooms 2 & 6, Side C	42" x 36"
Beige/Window Frame	2	Rooms 6 & 20, Side D	42" x 36"
Brown/High Bay Window Frame	4	Room 1, Side B	42" x 36"
Brown/High Bay Window : Frame	5	Room 1, Side D	42" x 36"

NOTE: Table 2A includes all windows with LBP - windows that tested positive by XRF and those

with the same paint as those tested.

Table 3 -Lead-Based Paint Locations (XRF)
Other Surfaces/Components

Identified Lead- Based Paint (Color)	Lead Content (mg/cm²)	Location	Component and Substrate
Gray	4.8	Room 1, Side B	Beam above windows (Wood
Gray	5.6	Room 1, Side B	I-Beam (Metal)
Gray	6.9	Room 1, Side B	Roof Support (Metal)
Gray	2.2	Room 1, Side D	Beam above windows (Wood)
Gray	2.2	Room 1, Side D	I-Beam (Metal)
Red	6.9	Room 1, Side C	Door Lintel (Metal)
Beige	2.0	Room 2	Roof Deck (Kaylo)
Black	4.5	Room 2, Side A	Wall Trim (Wood)
Green	3.2	Room 2, Side A	Wall Trim (Wood)
Green	4.4	Room 2, Side C	Wall Trim (Wood)
Black	2.4	Room 2, Side A	Baseboard (Wood)
Beige	4.8	Room 2, Side A	Wall (Drywall)
Green	3.6	Room 2, Side A	Wail (Drywall)
Green	2.8	Room 2, Side D	Wall (Drywall)
Green	2.3	Room 2, Side C	Wall (Drywall)
Beige	3.3	Room 2, Side C	Wall (Drywall)
Green	6.8	Room 2, Side C	Wall (Drywall)
Gray	4.5	Room 2, Side C	Window Sill (Wood)
Gray	3.5	Room 2, Side C	Window Sill (Wood)
Gray	3.6	Room 2, Side C	Window Trim (Wood)
Green	3.0	Room 2, Side C	Window Trim (Wood)
White	1.4 1	Room 3, Side D	Wall (Brick)

Blue	2.0	Room 6, Side	C Wall (Wood)
Blue	4.2	Room 6, Side I	Wall (Wood)
Blue	4.0	Room 6, Side I	Wall (Wood)
White	3.8	Room 6, Side A	Wall (Wood)
White	3.7	Room 6, Side A	Wall (Drywall)
Blue	2.1	Room 6, Side C	Baseboard (Wood)
Gray	3.3	Room 6, Side C	Window Sill (Wood)
Gray	3.0	Room 20, Side D	Window Sill (Wood)
Red	2.9	Room 20, Side	Wall Trim (Wood)
White	2.7	Room 20, Side	Wall (Drywali)
White	2.0	Room 20, Side B	Wall (Drywall)
White	2.6	Room 20, Side C	Wall (Drywali)
White	2.0	Room 20, Side D	Wall (Drywali)
Red	2.2	Room 20, Side	Baseboard (Wood)
Yellow	13.0	Exterior, Side A	Modified Bollard (Metal)
Yellow	9.0	Exterior, Side A	Modified Bollard (Metal)
Yellow	6.2	Exterior, Side A	Edge Protector (Metal)
Yellow	5.2	Exterior, Side A	Edge Protector (Metal)
White	5.9	Exterior, Side A	Edge Protector (Metal)
White	4.8	Exterior, Side A	Edge Protector (Metal)
Beige	4.7	Exterior, Side A	Door Lintel (Metal)
White	5.0	Exterior, Side A	Roll-Up Door Lintel (Metal)
Yellow	5.8	Exterior, Side C	Modified Bollard (Metal)



		The state of the s	
Yellow	2.1	Exterior, Side C	Edge Protector (Metal)
White	5.3	Exterior, Side C	Edge Protector (Metal)
White	3.1	Exterior, Side C	Roll-Up Door Lintel (Metal)
Beige	3.3	Exterior, Side C	Door Lintel (Metal)
Beige	3.3	Exterior, Side C	Window Lintel (Metal)
Beige	6.6	Exterior, Side C	Window Lintel (Metal)
Beige	2.6	Exterior, Side D	Window Lintel (Metal)
Beige	7.2	Exterior, Side D	Window Lintel (Metal)

NOTE: Many components were not tested and were assumed positive by reference to other similar components painted the same color that tested positive. These components were not listed in this table; however, their locations are noted on Figure 1 in Appendix A.

### 3.2 Dust Wipe Samples

Dust wipe samples were obtained following the EPA/HUD protocol. A template measuring one square foot was used to provide a known sampling area. Concentrations of  $40.0~\mu g/h^2$  or greater are considered contaminated, in accordance with HUD/EPA guidelines. One dust wipe sample was obtained in each room except for the drill room, where three samples were collected and the hallway/corridor where two samples were collected. A total of 23 wipe samples were collected. Laboratory results from the dust wipe samples are presented in Appendix C. Seven rooms had lead dust contamination above the threshold. The locations determined by laboratory analysis to be contaminated with lead dust are listed in Table 4 and on Figure 2 in Appendix A.

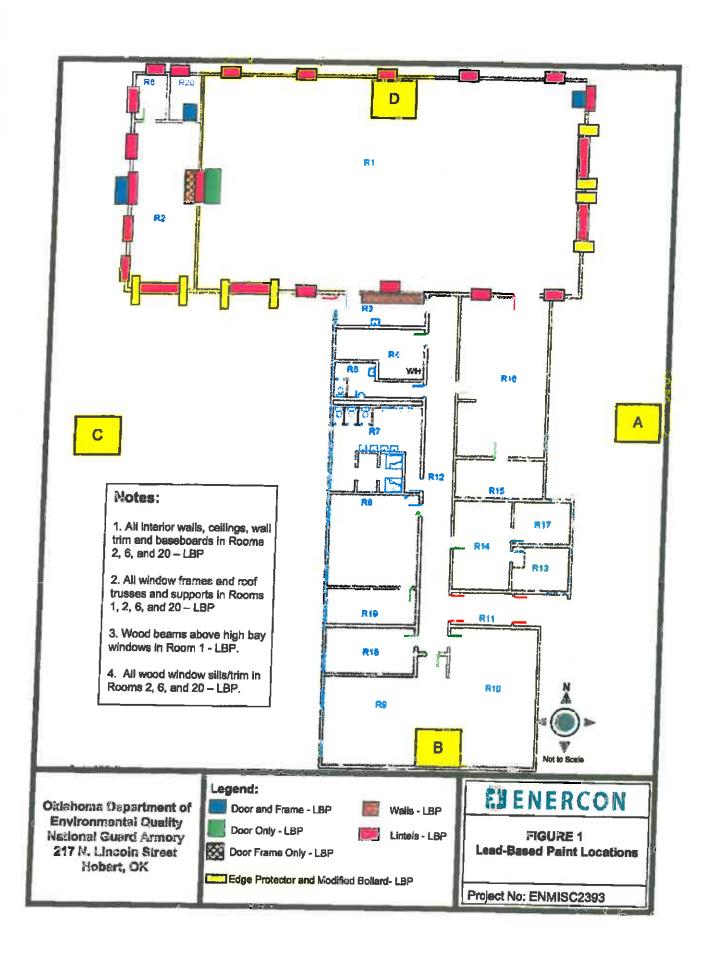
Table 4 - Positive Dust Wine Locations

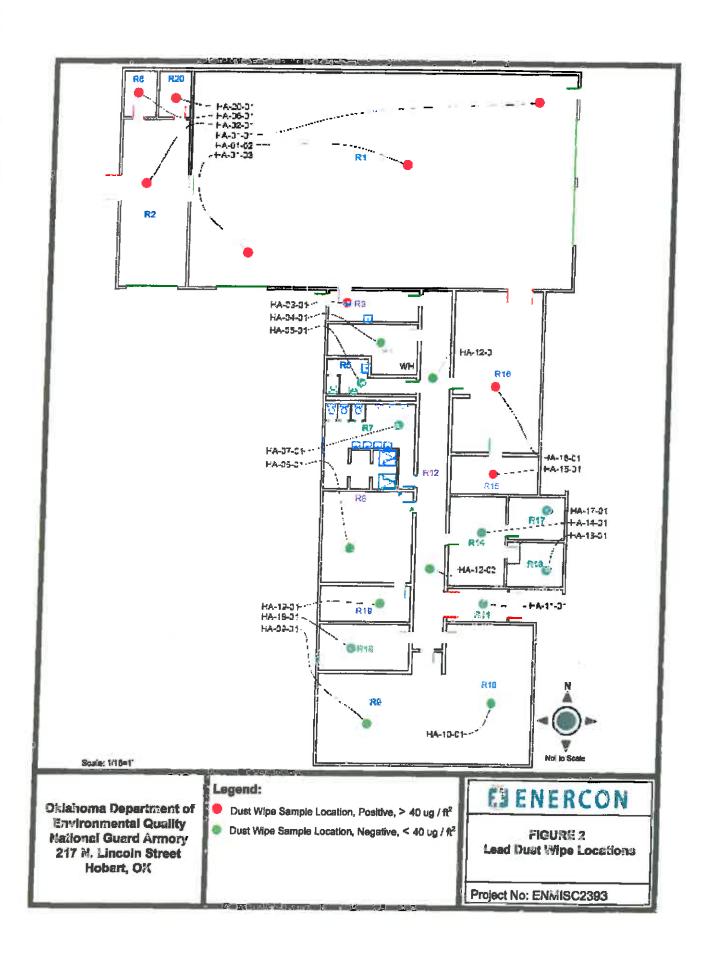
Sample Number	Lead Content (µg/ft²)	Location	Square Footage of Positive Location
HA-1-01	146	Room 1	4,590 SF
HA-1-02	109	Room 1	
HA-1-03	89.4	Room 1	
HA-2-01	221	Room 2	624 SF
HA-3-01	51.3	Room 3	158 SF
HA-6-01	340	Room 6	83 SF
HA-15-01	92.4	Room 15	190 SF



HA-16-01	140	Room 16	760 SF
HA-20-01	295	Room 20	83 SF

### APPENDIX A





### APPENDIX B

### APPENDIX B - PHOTOGRAPHIC RECORD

#### Project No: ENMISC2393



Photo #1 Hobart National Guard Armory.



Photo #3: Lintel above roll-up door - LBP.



Photo # 5: Modified bollards and edge protectors - LBP.

### Project Name: Hobart National Guard Armory



Photo #2: Modified bollards and edge protectors - LBP.



Photo # 4: Beige door, door frame, and fintel - LBP.



Photo #6: Window frame and lintel - LBP.

#### APPENDIX B - PHOTOGRAPHIC RECORD

#### Project No: ENMISC2393



Photo #7: Door and frame and fintel Side C Exterior - LBP

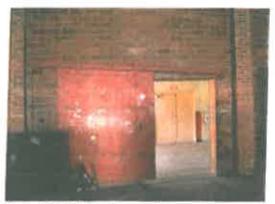


Photo #9: Sliding door and track on Side C of Room 1 - LBP.



Photo #11: Walls, door frame, wall trim, and baseboard-Room 2 – LBP.

### Project Name: Hobart National Guard Armory



Photo #8: Roof trusses and supports in Room 1 – LSP.



Photo #10: High bay window in Room 1 - LBP



Photo #12: Kaylo celling in Room 2 - LBP

#### APPENDIX B - PHOTOGRAPHIC RECORD

#### Project No: ENMISC2393

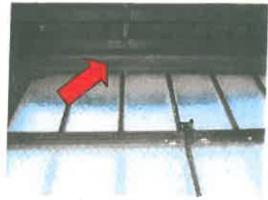


Photo #13: Gray painted wood beam above high-bay windows in Room 1 - LBP

### Project Name: Hobart National Guard Armory



Photo #14: White painted brick wall in Room 3 - LBP

### APPENDIX C



2033 Haritage Park Drive / Oklahoma City, OK 78120 / (405) 755-7272 / Fax (405) 755-2038

## Environmental Chemistry Analysis Report

QuanTEM Set ID:

197788

Date Received:

07/20/11

Received by:

Sherrie Leftwich

Deta Sampled:

Time Sumpled:

Analyst:

BM

Date of Report:

7/21/2011

AIHA ID: 101352

Climit:

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Oklahoma City, OK 73116

Acct. No.:

A845

**Hobert Armory** 

Project: Location:

217 N. Lincoln St., Hobart, OK

Project No.:

QuanTEM ED	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	HA-1-01	Wipe	Lead	146	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
002	HA-1-02	Wipe	Lead	109	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
003	HA-1-03	Wipe	Lead	89.4	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
004	HA-2-01	Wipe	Lead	221	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
005	HA-3-01	Wipe	Lead	51,3	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
006	HA-4-01	Wipe	Lead	32.8	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
007	HA-5-01	Wipe	Lead	34.5	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
900	HA-6-01	Wipe	Lead	340	16	ug/sq. Pt.	07/21/11 13:00	W EPA 7420 (1)
009	HA-7-01	Wipe	Lead	<16.0	16	ug/sq. Ft,	07/21/11 13:00	W EPA 7420 (1)
010	HA-8-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
011	HA-9-01	Wipe	Lead	<16.0	16	0g/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
012	PA-10-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
013	HA-11-01	Wipe	Lead	16.6	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
014	HA-12-01	Wipe	Lead	33.1	16	ug/sq. Pt.	07/21/11 13:00	W EPA 7420 (1)
015	HA-12-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
016	HA-13-01	Wipe	Lead	<16.0	16		07/21/11 13:00	W EPA 7420 (1)
017	HA-14-01	Wipe	Lead	<16.0	16		07/21/11 13:00	W EPA 7420 (1)

Note: Sample results have not been corrected for blank values.

This report emplies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and ere not to be reproduced without specific written permission.

Unicae otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe

EPA Method 7420 (1) = EPA 600/R-93/200 Prepentition Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7002 Analysis Modified



2033 Heritage Park Drive / Oktahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

## Environmental Chemistry Analysis Report

QuanTEM Set ID:

197788

Date Received:

07/20/11

Received By:

Sherrie Leftwich

Date Sampled:

Time Sampled:

Analyst:

BM

Date of Reports

DM

7/21/2011

AJHA ID: 101352

**Client:** 

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Oklahoma City, OK 73116

Acet. No.:

A845

Project:

Hobert Armory

Location:

217 N. Lincoln St., Hobart, OK

Project No.: N/A

Quantelet ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	HA-15-01	Wipe	Lead	92.4	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
019	HA-16-01	Wipe	Leed	140	16	ug/sq. Ft.	07/21/11 13:00	W EPA 7420 (1)
020	HA-17-01	Wipe	Lead	<16.0	16		07/21/11 13:00	W EPA 7420 (1)
021	HA-18-01	Wipe	Lead	<16.0	16		07/21/11 13:00	W EPA 7420 (1)
022	HA-19-01	Wipe	Lead	<16.0	16		07/21/11 13:00	W EPA 7420 (1)
023	HA-20-01	Wipe	Lead	295	16		07/21/11 13:00	W EPA 7420 (1)

Authorized Signature:

UNES.

Benton Miller, Analyst

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criterie. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7022 (2) \*\* EPA 600/R-93/200 Preperation Modified, EPA 7082 Analysis Modified

## Supplemental Report QAQC Results

QAID: 8982 Test: Lead Date: 7/21/2011 Matrix: Wipe

Lab Number: 197788
Approved By: Benton Miller
Date Approved: 7/21/2011

Notes:

## Blank Date:

Type of Blank	Blank Value
ICB	1 0
FCB	0
Matrix Blank	0

## Standards Data:

Standard	Low Limit	Obtained	High Limit
ccv	4.5	4.9	5,5
FCV	4.5	4.9	5.5
ICV	0.8,	1.1	1.2
RLVS	0.256	0.382	0.384

## Duplicate Data:

Recovery Date:

Sample Number	Recuit	Spike Level	Repuit + Spike	% Recovery	Dup. Result + Spike	% Dap. Recovery	% Spike RPD
MS-W3	0.000.	5.427	5.925	109.2	5.900	108.7	0.4
MS-WI	0.000	5.438	5.496	101.1	5.454	100.3	

Anthorized Signature:\_\_

~ ZZ

Benton Miller, Analyst



## LEAD CHAIN OF CUSTODY

2023 Heritage Park Drive, Oktahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Fer: (405) 755-2058

Page | of 2

Lab No.

LEGAL DOCUMENT - PLEASE PRINT LEGIRLY

Skrubinky Sample Delivery - Call to Sciedule . G. Use this soldiess for Between order 5220 ft. Samin Forks, Oklobers City, CS 73105-6517 . Hark Peckago "Holdfor Salunday Michael"



## LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma Chy, OK 75120-7502 (800) 622-1650 • (485) 755-7272 • Fiz. (705) 755-2056

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY



Flags  Flags  Gall to Schedule a Daubberderent of	Charles Control of the Control of th	Poject Leastles 217 N. Uncoln St., Hobert OX	0 ≥ € € € € € € € € € € € € € € € € € €	6rl			>	> 1	>	0				
Company: ENERCON  13   //4 //- 0   14   -/2-0   15   -/2-0   16   -/3-0   17   -/4-0   18   -/7-0   20   -/7-0   21   -/9-0   22   -/9-0   23   V-20-6   24   -20-6   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   20   -/9-0   20   -/9-0   21   -/9-0   22   -/9-0   23   V-20-6   24   -/9-0   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   20   -/9-0   20   -/9-0   21   -/9-0   22   -/9-0   23   V-20-6   24   -/9-0   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   20   -/9-0   20   -/9-0   20   -/9-0   21   -/9-0   22   -/9-0   23   V-20-6   24   -/9-0   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   20   -/9-0   20   -/9-0   20   -/9-0   21   -/9-0   22   -/9-0   23   V-20-6   24   -/9-0   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   20   -/9-0   20   -/9-0   20   -/9-0   21   -/9-0   22   -/9-0   23   -/9-0   24   -/9-0   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   20   -/9-0   20   -/9-0   20   -/9-0   21   -/9-0   22   -/9-0   23   -/9-0   24   -/9-0   25   -/9-0   26   -/9-0   27   -/9-0   28   -/9-0   29   -/9-0   29   -/9-0   20	ON THE PARTY OF	Project Name												M-CAU, TO SCHEDULE o thanks account

## APPENDIX D

┸			i Canada and and and and and and and and an	la constant	- Calling	HOOL	Į	Roserts Parc	T.	PEX
3 7/19/2014 5:47		-			CAI IDDATE				(0)	0.0
L		-			CALIDRA II		Pos	Positive		
<del>-</del>		-			CALIBRATE		Pos	Positive	-	
-4-	METAL	4	good	NEW YORK	CALIBRATE		Pos	Positive	-	5 6
o Warzutt 10:06 MCDIFIED BOLLARD	METAI	<	200	A COMMAND	HOBART ARMORY	EX	ERIOR Pos	Positive		
7 7/19/2011 10:13 EDGE PROTECTOR	METAI	C 4	X 200	YELLOW		-	EXTERIOR Posi	iivs	200	
7.19/2011 10:14	METAI	( <	300	YELLOW	HOBART ARMORY	=	EXTERIOR Pos	9	2 6 8	
7/19/2011 10:14	METAI	<	A COCK	YELLOW	HOBART ARMORY	-				6
10 7/19/2011 10:14 EDGE PROTECTOR	META	₹ 4	POOP.	WHITE	HOBART ARM	RMORY EXTERIOR	1	1		ò
	MEIAL	e <b>t</b> .	POOR	WHITE	HOBART ARMORY	F	+	1	0.0	S
12 7/19/2011 10:17 DOOR	MEIAL	<	INTACT	WHITE	HOBART ARMORY	1:	┿		_	
	MEIA	¥	POOR	BEIGE	HOBART ARMODY	+	+	COT > BARRES	00 > 0	00 V
(4 7/19/2011 10:12 DOCD   MITTER	METAL	4	POOR	BEIGE		٠.	7	IIVe	ι. 	-
I WITE POIL USES	METAL	<b>4</b>	POOR	BEIGE	HORART ADMOR	+	-+	Positive	.8	_
	METAL	٧	POOR	MHITT	HODADT ABA	-		Positive 4	3.7	4.7
	METAL	4	POOR	WARTE	LINDARY ARMORT	$\rightarrow$	$\neg$	Positive	5 3.6	
1 THE THE PARTY OF	METAL	4	POOR	MALITTE	PODEN AKIN	-	- 1	Negative < LOD	001 > 0	001 v
	METAL	4	BOOM	MALITE	TOBAKI AKINOKY	-		Negative < LOD	001 × 0	2
18 MAY TO 27 WINDOW FRAME	METAL	<b>*</b>		17.0 June	FOBARI ARMORY			Negative < LOD	00 > 0	V Ou
	METAI	ξ <	2000	AMAIL E	HOBART ARMORY	_	-	Negative < LOD	2017	3 5
	METAI	<	200	WHILE	HOBART ARMORY	ORY EXTERIOR	-			
22 7/19/2011 10:28 WINDOW SILL	CONCETE	<	2 2	WHITE	HOBART ARMORY	_	$\overline{}$	Nagative < 100		
23 7/19/2011 10:29 WINDOW SILL	CONCETE	< <	N CONTRACT	WHITE	HOBART ARMORY	_	т	Negative 0 1		
	CONCRETE	< .	POOR	WHITE	HOBART ARMORY	$\overline{}$	т	1	1	
	CONCOCTE	< •	FOOR	WHITE	HOBART ARMORY	-	т	Medialine 0.11	3 5	3
	METAI	₹ .	POOR	WHITE	HOBART ARMORY	-	т	1	1	10
27 7/19/2011 10:34 WINDOW FRAME	METAL	∢.	POOR	WHITE	HOBART ARMORY	+	т	1	$\rightarrow$	יי ער
	METAL.	∢ .	POOR	WHITE	HOBART ARMORY	_	т			200
29 7/19/2011 10:35 DOOR FRAME	MEIAL	<	POOR	WHITE	HOBART ARMORY	-	т	TOTAL VIEW		0
	MEIA	⋖.	POOR	WHITE	HOBART ARMORY	┰	т	Modelho A LOD		
31 7/19/2011 10:40 CEILING PORCH CANDOV	MEIAL	∢.	POOR	WHITE	HOBART ARMORY	1~	_	Mercellian < LOD		8
32 7/19/2011 10:40 CEII INC BOOCH CANODIC	MOON I	<	FAIR	WHITE	HOBART ARMORY	_	Т.	7	깆	COD V
33 7/19/2011 10:41 CANOPY CEITING STIDDOGT	1.	⋖	FAIR	WHITE	HOBART ARMORY	1	┰	1		QO] >
	+	V	FAIR	WHITE	HOBART ARMORY	<del>).</del>	+	1		U.5 < LOD
	MEIAL	8	POOR	WHITE	HOBART ARMORY	→	+	Negative 4 LOD		00
36 7/19/2011 10:43 WINDOW SILL	MEIAL	0	INTACT	WHITE	HOBART ARMORY	_	┯			00 v
37 7/19/2011 10:43 WINDOWN SII 1	CONCRETE	8	POOR	WHITE	HOBART ARMORY	1.	7	OCI > evalgan	9	200
38 7/19/2011 10:42 Manipulmar com	CCNCAT	DĎ)	POOR	WHITE	HORAD TANAD	T	7		V	9
	CONCRETE	8	POOR.	WHITE	HORART ADMON	1.		0.09		1,4
40 7/40:014 40:44 MARIDON COLL	CONCRETE	8	POOR	WHITE	HODADT ANDRES	┪.	1	_ 100 1	COD	007 v
41 7/100044 40-45 MANDOW PRAME	METAL	8	POOR	WANTE	TADMAN ARMORY	П.	-1	Negative < LOD	Q07 > C	4 LOD
	METAL	<u>an</u>	INTACT	WANTE	TOPON AND TOPON	т.	$\neg$ 1	Negative < LOD	001 × C	4 LOD
	METAL	æ	INTACT	DI ACK	DEPAT ARRIORY			Negative < LO	COD < LOD < LOD	4 LOD
	METAL	<u>m</u>	INTACT	100 I	FICESAKI ARMORY	_	$\overline{}$	Negative < LOD	001>0	NO V
	METAL	C	2000	1257 A	HOBART ARMORY	$\neg$	-	Negative < LOD		100
45  7/19/2011 10:48 WINDOW FRAME	METAI	,	2	WHITE	HOBART ARMORY	_	✝			

Component	10年4年2月前		The second second							
//19/2011 10:49 WINDOW FRAME	METAI			To Surface of	き続	Rober	1	1	ı	
7/19/2011 10:49 WINDOW FRAME	METAI	ه د	ž Ž	WHITE	HOBART ARMORY					英
7/19/2011 10:49 WINDOW LINTEL	METAI	ه د	POOR	WHITE	HOBART ARMORY	1	7-			0 0 V
7/19/2011 f0:50 WINDOW! INTE	A CITY OF	S	INTACT	<u> </u>	HOBART ARMODY	1	7	3		, LOD
7/19/2011 10:50 W/NDOW! INTER	MELA	ပ	INTACT	WHITE	HOBART ARKODY	1.	-	00,		V [OD
7/18/2011 10:50 WANDOW I INTEL	MELA	ပ	INTACT	WHITE	HORART APLIANOV	1	Musica	9	< LOD >	\$ [.0D
7/19/2011 10:51 WANDOW SILI	MEIA	ပ	INTACT	WHITE	HOBART APRICON	-	Negalive	9		00] v
7/19/2011 10:51 WINDOW Sti I	MELAL	ပ	POOR	WHITE	HOBART ARMODY	i.	Negative	9	9	<b>QO7</b> >
7/19/2011 10:51 WMNDOW SILL	METAL	ن	POOR	WHITE	HOBART ARMODY	7.	1	- 1		do) »
7/19/2011 10:52 WANTSON SILL	METAL	ပ	POOR	WATTE	HORART APPLODS	T.	Negative	90.0	0.09	1.1
7/19/2011 10/K2 INCO 1 INCO	METAL	ပ	POOR	WHITE	HORADT ABIADA	Т.	Negative	c Lob	4.00 ×	00 V
7/19/2011 10-5a DOOD	METAL	ပ	FAIR	BEIGE	HOBADT ABLIANCE	7	Negative	4 LOD	v (OD) v	00] v
7/19/2011 10:52 DOOR FE 1:::	METAL	U	POOR	RFICE	HODGE AND TOTAL		Negative	< LOD	4 LOD A	00 v
TIONAL ISSUED TO THE PROPERTY OF THE PROPERTY	METAL	ပ	POOR	DEIOE	DODARI AKINOKY	~	Negative	007 v	4 LOD A	COL
	METAL	C	AUCA BOOM		TOBAK! AKMORY	-+	Negative	00 v	COLV	8
WE'ZUTT 10:35 EDGE PROTECTOR	METAL	U	auda auda	VEL CON	HUBAKI ARMORY		Positive	5.8	2.3	u u
WEWALL TO:SS EDGE PROTECTOR	METAL	0	2000	A LICEN	HUBART ARMORY	_	Positive	2.1	7	i e
WINNER TO SE LINTEL ROLL-UP DOOR	METAL	c		MATILE I	HUBART ARMORY	_	F	6	000	ė u
7/18/2011 11:04		<b>,</b>	2	WHITE	HOBART ARMORY		1	6	d er	3 .
W18/2011 11:08		1						5	1	3 8
7/19/2011 11:08		1			CALIERATE		Domitti	50.0	200	20.0
77/9/2011 11:09					CALIBRATE		a namine	-	-	00°
7/19/2011 11-10		-	' 		CALIFFARE		LOSIENS	=	**	U. 1.
7/19/2011 11-13 DOOD					CA! IRPATE		2	-	Ţ	<u>-</u>
7/19/2011 11-12 DOOD EDAMT	METAL	ပ	POOR	BEIGE	HOBADT ADMONY		Negative	0.9	0.9	4.00
7/19/2014 1-14 DOOR   PICKINE	METAL	ပ	POOR	BEIGE	HODADT ADMORT	EN LERIOR	Positive	17	1,2	1:1
	METAL	ပ	POOR	RFIGE	HODAT ARMORY	1.	Posifive	1.7	1.7	2.3
1014 1114 WINDOW FIRME	METAL	U	POOR	REIGH	HODARI ARMUK)	_	Positive	3.3	3.3	4.6
MODOS 11.13 WINDOW LINIEL	METAL	U	PCOR	BETCE	HODARI AKIMUKY	-	Positive	2.7	2.7 <	QO V
2	METAL	U	POOR	REIGE	HOBARI ARMORY	-	Positive	3,3	3.3 <	do 1
	NETAL	4	BUUL	BEIOE	HUBAK I AKMORY		Positive	8.6		9 9
MERCULI 11:16 WINDOW FRAME	METAL	U	POOP	PERCE	TOBAR AFMON	-	Nell	1.7	00 I <b>×</b> ∑.	G
7/10/2011 11:10/WINDOW SILL	CONCRETE	C	ACC A	REIGH	HOBAK I AKMORY	~	Poultive	N	2 <	COIV
TIS MODELL TITL WINDOW SILL	CONCRETE	ပ	aced		PODARI AKMOKY	-	Negative	90.0	0.06 < LOD	9
ZADOO4 44.01	CONCRETE	U	POOR		DOBARI ARMOR	-	Net	0.08	0.08 < i On	6
7/10/2014 44:02 MINDOW SILL	CONCRETE	9	POOR	BEIGE	HOBAR ARMORY	$\neg$	Negetive	QOT >	0.09	c ton
710/2011 11.22 WINDOW SILL	CONCRETE		POOR	מבונים	TOBAK AKMORY	~~	Negative < LOD		< LOD < 1 OD	0
7 5	METAL	٥	8000		TUBAKT ARMORY	-	Negativo .		V GO V	COL
	METAL	0	POOR	מרוכני	HUBAKI ARMORY	_	Positive	1.7	1	6
DI 17.23 WINDOW LINTEL	METAL	0	POCE	מבוסב	HOBAR! ARMORY		Positive	3.1	3.1	200
	METAL	٥	POOR	BEICE	MOBBET ARMORY		Positive	2.6		4.7
7/19/2014 12:34 NAMES AND THE STATE OF THE S	KAYLO		FAIR	REIGH	HOBART BRINGRY	-	Positive	7.2	3.9	73
49.99	METAL	8	POOR	BROWN	- 11	_	Positive	2	٧	6
	METAL	<u>m</u>	POOR	BROWN	HODAGT ASHIDE		Positive	21	2	CO
7/19/2011 12:24 BEAM ABOVE WINDOWS	WOOD	<b>a</b>	POOR	VAG:	HOBARI AKMORY	-	Positive	24		7
7/19/2011 12:24 I-DCAM	METAL	80	POOR	GRAY	UNDARK ARMORY	-	Positive	4.8	4.8	2
THE STATE OF SOLING	METAL	<u>m</u>	POOR	GRAY	HODART ARMORY	~~	Positive	5.8	5.6 <	001 001 001
					THOMEN I NEGOTI	FOOM 1	Positive	6.9	800	80.0

92 715 20 11 12:35 (11 554 147 307 148				ACTOR.	PETRONES	ACCOUNT STANCTOR	1 2 2				Y
93 7/19/2011 12:35 I-REAM		C.C.M.	Ω	POOR	GRAY	TOTAL STORY STORY	. 1000	3	1	AFT.	1.0
94 7/19/2011 12:40 DOOD		MEIAL	0	POOR	GRAY	14. 高速配子 24. Martin	7 1000	POSITIVE	X.	22	Ę
95 7H 9/2011 12-40 PCOD		METAL	6	POOR	BEIGE	i lie	E CONTRACTOR DE LA CONT		2.2	2.2 <	< LOD
	2	METAL	8	POOR	BEIGE	HORADT ADMORT	E COM	Negative	> 007 >	< 100 ×	4 LOD
		METAL	8	POOR	RFIGE	HOBABT ABMORT	FCOM 1	Negative	V 000 V	> 007 >	9
		METAL	8	FAIR	BFIGE	HOBINA TO BOLL	KOOM	Negative	V 001 v	> 001 >	000
		METAL	8	FAIR	BEIGE	LOBAST ASSOCIA	_	Negative -		> 001 >	41.0D
		METAL	m	FAIR	BEIGE	HOBART ARMORY		Negative .	> 007 >	> 007 >	4.LOD
_ !		METAL	00	FAIR		TODAK I AKMOKY	_	Negative	×1001×	V 001 v	OI v
		METAL		FAIR		TOBAK! AKMORY	_	Nagative .	> [OD >		QO V
- 4	FRAME	MOON			OFFICE	HUBAKI ARMORY	ROOM 1	Negative	V COTV	COLV	20
	FRAME	WOOD	ماد	Z Z	DE SE	HOBART ARMORY	ROOM 1	Negative	× 00   ×		
104 7/19/2011 12:46 DOOR		METAI	D (	A COC	GKAY	HOBART ARMORY	ROOM 1	Nedative			
105 7/19/2011 12:48 DOOR LINTE		MCTAI	٥	Y S	KED	HOBART ARMORY	ROOM 1		2 5		
108 7/19/2011 12:48 DOOR FRAM		I ME	ر	FAIR	RED	HOBART ARMORY	ROOM 4	Doeithio	2 9		2
107 7/18 2011 12-49 TEIN MAIN		WOOD	4	POOR	BLACK	HOBART ARMORY	BOOK S	DAITION L	ק ק		
12.40	5	WOOD	⋖	POOR	BLACK	HORART ARMODY	1000	LOSKING	, k		9
7/10/2011 12:45	\$	MOOM	4	POOR	GREEN	HORADY ADMINON	Z WOOD	Positive	4.5	4.5	4.
7//0//044 40-64	×	MOOD	o	POOR	CHEEN	THORNE ACROCK	KOOM 2	Positive	32	3,2 <	9
4	W	WOOD	4	acod	בו אינוני	TOEAR! AKMUKY	R00% 2	Positive	4.4	4.4	4
		DRYMALI	. 4	200		- 1	ROOM 2	Positive	2.4	_	5
	2	DRYWAL	T	אלקים היים היים היים היים היים היים היים הי		HOBART ARMORY	ROOM 2	Positive	A		
		PDVA/AI I	₹ ,	POOR POOR	RED	HOBART ARMORY	ROOM 2	1 4			
114 7/19/2011 12:52 WALL		T WALL	<	POOR	GREEN	HOBART ARMORY	ROOM 2				
115 7/19/2011 12:52 WALL		DKYWALL	۵	POOR	GREEN	HOBART AFMORY	ROOM 9	T USALING	9	_	
116 7/19/2011 12-52 WAI		DIRYWALL.	U	POOR	GREEN	HOBART ARMORY	S HOOM	PARING L	2.2	2.8	6
117 7/19/2011 12:53 WALL		DKYWALL	ပ	POOR	RED	HOBART ARMODY	S POOD			2.3 V	200
	ב ב	DRYWALL	o	POOR	BEIGE	HORART ADMODY	2 6000	00 (	8	< LOD < LOD	9
	G	DRYWALL	8	POOR	GREEN	HORART ABMORY	Z MOON	FOSITIME			< LOD
		DRYWALL	<b>6</b> 0	POOR	CREEN	HODEN LANGUE	ROOM 2	AS I	2 0 0 0	200	007 ×
_		WOOD	T	DOD	SPACE	DOOR AKMORY	ROOM 2	Positive	6.8	5.3	6
//18/2011 12:55		MOOD	T	1000	2000	HUBAKI AKIMORY	ROOM 2	Positive	4.5		O V
		MOON	T	2000	GRAY		ROOM 2	Positive	3.5		3 5
		MOOD	T	F 0	GRAY	HOBART ARMORY	ROOM 2	Positive	8		
			,	2004	GREEN	HOBART ARMORY	ROOK! 2	Positive			
			1						206	0 673	
			T			CALIBRATE		Negathan	0	100	
127 7/19/2011 14:10			1			CALIBRATE		Position	8	) 2	0.0
128 7/19/2011 14:15 SHELF	38	WOON	1			CALIBRATE		Mematine	- 0	- 6	5
129 7/18/2011 14:18 WALL	NA C			POOR	GREEN	HOBART ARMORY BOOM ?	BOOM 2			2	8
130 7/19/2011 14:17 WALL	3		LU	FAIR	RED	HOBART ARMODY	A MOOD	200			007 v
131 7/19/2011 14:20 El DOD	1	BLOCK BLOCK		FAIR	RED	_	E COURT		v 000 v	$\neg$	4 LOD
	3		8	POOR	GRAY		L MOON			V 007 ∨	207 ×
			8	POOR	BI UF	_	ROOM 2	Negative	0,1	0.1 < LOD	8
			Γ	POOR	1 LE	HODART ADMORY	ROCINT 6	Negative <	2001 >	V 001 v	00 v
	×.	MOOM	Т	FAIR	P1 1 IC		ROOM 6	Negative < LOD	100		97
30 MAL	NA.	MOON	Į			HUBAKI AKMORY	ROOM 6	Negative - 100	200		100

719/2011 14:23 719/2011 14:23 719/2011 14:23 719/2011 14:25 719/2011 14:25 719/2011 14:25 719/2011 14:26		900.450 (300.45) (30.45)	_ <u>_</u>	FAIR	NO.		-	Planting.	,5 <u>.</u>	V P la l	e,
		WALE WALE	<u>∩</u> #	FAIR	BLUE	No. of the last of	-	Constitute	<b>3.</b>	Te.	લ
	i	がいて	111			Company of the property of the party of the		Committee of			6
			)	FAR	THE SECOND	The state of the s	=		4.2	4.4	
		doow	4	FAIR	WENTER	CACAGAS AND CO	200X	Positive	4		
		DRYWALL	4	FAID	TAN INTE	HOBARI ARINGKY	-	Positive	3.8	er.	ē
		WOOD			A L	HOBART ARMORY	ROOM 6	Positive	2	1	3 6
		MOON	) (	LAIK	BLUE	HOBART ARMORY	-	Positive			3
		TO COUNTY	ונ	r S	GRAY	HOBART ARMORY	1.	Doelithe	1 6		3
		DOM:	Δ,	POOR	GRAY	HOBART ARMORY	+-	Doolule	5.0	6.53	65
Į.		ADOM:	m	POOR	GREEN	HOBART ARMORY	1-	- Callive	6	8	임
146 7/19/2011 17-27 WALL TERM		WOOD	മ	POOR	RED	HORART ADMODY	1.	Losime	2.6	2.8	00 v
740m044 44.047		WOOD	∢	POOR	RED		1	Positive	4	4.4 <	ما م 100
67 1 14.28		DRYWALL	Γ	BOOM	NACI PER	TODAK AKMORY		Positive	2.9		O v
1/18/2011		DRYMALI	Τ			HUBART ARMORY	ROOM 20	Positive	2.7		2 0
_		DDVWALI	T	אַ מַבּ	MAII IE	HOBART ARMORY		Positive	٠	, I	
150 7/19/2011 14:28 WALL		DOMAN	ا د	POOR	WHITE	HOBART ARMORY	ROOM 20	Poeithra	5 G	V 0	
151 7/19/2011 14:29 WALL		DESCRIPTION	٦	POOR	WHITE	HOBART ARMORY	ROOM 20	Dooliing	0,4	4.0	3
152 7/19/2011 14:20 WALL		URYWALL	7	POOR	GRAY	HOBART ARMORY	POOR 30	- Calling	N		9
153 7/19/2011 14-30 GUET E		DRYWALL		POOR	GRAY	HORART ARMODY		ACTION OF	v (101 v	ν ΠΟ] ν	2
7/10/2011 14-99 D. CTD		WOOD	8	POOR	BEIGH	HORAPT ADMODY		Y GAMMADAN			9
-		WOOD	4	POOR	RED	TACING TOAGOL		Negative < LOD		v 007 v	4 LOD
		CONCRETE	4	POOR	VADO.	LINDRAL ARMORT	ROOM 20	Positive	2.2	2.2 <	4 LOD
		METAL		FAIR	1000	HODAK I AKMUKY		Negative	0.07	0.07 <	QO1 >
13/ // BYZUT 14:44 DOOR FRAME	ш	METAL	T			HUBARI AKMORY	$\overline{}$	Negative < LOD	200	V CO V	A LOD
	Ш	META	T	CAID		HOBART ARIKORY	_	Negative <	< LOD < 10D	0	
158 7/18/2011 14:46 W/INDOW FRAME	AME.	METAI	T	7/4/7	Writte	HOBART ARMORY	ROOM 3	Negative < P.O. / J. O.	000		
		CONOBERT DI CON	، د	S S S S S S S S S S S S S S S S S S S	WHITE	HOBART ARMORY		Negative	3 8		
		CONCRETE BLOCK	< .	INIACT		HOBART ARMORY		Modelius	1		301
162 7/19/2011 14:47 WALL		CONCRETE BLOCK	<	INTACT	WHITE	HOBART ARMORY		Menakina		V 100	3
163 7/19/2011 14:37 WAI I		CONCRETE BLOCK		INTACT	WHITE	HOBART ARMORY	-	Magazin	2 6	0.0	01.
104 7/19/2011 14:48 WALL		CONCRETE BLOCK	ပ	INTACT	WHITE	HOBART ARMORY	BOOM 3	The section of		ر د د	001 v
7/19/2011 14:40		BRICK	٥	INTACT	WHITE	HORART ABANDY		Negrane	0.08	0.09 v	v Cob
		METAL	Q	FAIR	WHITE	HORART ADMODY	S MOOR	Positive	1.4	0.5	1
		WOOD	Г	INTACT	WHITE	HOBADT ABADT	FOCUM S	regalive < LOD	~ 00 01	< 100 ×	4 LOD
		METAL	×	INTACT	WHITE	HODADT ABMORY	200 E	Negalive	9.0	0.6 <	Q07 >
		METAL	Ī	INTACT	WATTE	LICENST APPROPRI	KOCA 5	Negative <		< LOD <	4 LOD
		METAL	Г	INTACT	WHITE	HODADT ADMORY	KOOM 5	Negative < LOD	LOD <		\$ LS
174 74 000044 44 CENTEROW LINTER		METAL	Γ	INTACT	WEATT	THOMAN I NICHOLI	ROOM 5	Negative < LOD < LOD	000		907 ×
		METAL		NTACT	WALITE	LOBARI AKMORY	ROOM 5	Negative <	< 100 < 100		4 Lob
7/18/2011 14:55		METAL	T	MTACT	WESTER	INCEAR! ARMORY	ROOM 5	Negative < LOD	8	> 001>	V CO
//13/2011 14:56		BRICK	T	MITACI	VATIFIE TO A STATE OF THE STATE	HUBWRT ARMORY		Negative < LOD < 1.00	1 0 0	00	2
- 1		BRICK	T	1000		HOBART ARMORY		Negalive	ALON ALON		3 5
						HOBART ARMORY		Negative			
-4			T	MIACI	WHITE	HOBART ARMORY		Necetive	d		
			=  -	NIACI	WHITE	HOBART ARMORY		-15	8 2	3	
- 1				NTACT	WHITE	HOBART ARMORY	ROOM 5	Necetive COL COL	; } }	100	3
- 1			اری	Л	WHITE	HOBART ARMORY	ROOM 7	Negative CO.	3 6	36	
180 7/18/2011 15:01 DOOR FRAME			7		BEIGE	HOBART ARMORY	ROOM 7	Menodia		36	
		ME AL	= V	INTACT	BEIGE	_	1000				

181 7/19/2	7/19/2011 15:C:	WINDOW	METAI			-	OH O	Remark	Bernitte		1	
7/19/2	211 15:02	7/19/2011 15:02 WINDOW LINTEL	METAI	اد	FAIR	WHITE	HOBART ARMORY		Magathan			4
7/19/2	011 15:02	7/19/2011 15:02 WINDOW SIL1	DEION	اد	FAIR	WHITE	HOBART ARMORY	_	Nonether	3 9	V 000	000
7/19/2	111 15:03	7/19/2011 15:03 WINDOW SILL	DAILCA	r)	FAIR	WHITE	HOBART ARMODY.	V. 1000				× 100
7/18/2	7/19/2011 15:03 WALL	WALL	DRICK	ပ	FAIR	WHITE	HORART ARMODY				V COD V	QD v
7/19/2	7/19/2011 15-04 WAST	WALL	BRICK	ပ	INTACT	HE N	HORADT ABLADA	$\neg$		0.03	0.03	00 v
7/19/2	7/19/2011 15-04 WALL	WAL I	BRICK	80	INTACT	WHITE	HORAPT ADMOSY	NOOM A			< LOD < LOD	COD
7/19/2	7/19/2011 15:04 Wat I	WAI	BRICK	٧	INTACT	WHITE	HORART ADMORY		Negative	0.0	0.04	QOT v
7/19/2	7/19/2011 15:05 DOOR	DOOR	BRICK	٥	INTACT	WHITE	HORART ADMICID		Negative	0.05	0.05 <	د <u>۱</u> ۵۵
7/19/ZI	7/19/2011 15:11		METAL	m	FAIR	WHITE	HOBART ARMODY	1000			0.07 < LOD	LOD
7/19/20	7/19/2011 16-12						TOWN TO THE	т.	Negative			007 v
7/19/2	7/19/2011 15:13						CALIBRATE			3.03	55	٥
7/19/20	7/19/2011 15:15			_			CALIBRATE		Negative	6.0	60	0.7
7/19/2	7/19/2011 i 5:16 DOCH	DOCE	4 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	4			CALIBRATE		- Callive		-	0.5
7/19/21	7/19/2011 15:17	DOOR FRANCE	MEIAL	<	INTACT	BEIGE	HOBART ARMORY	V POOR 1	OVDEQUIVE.	0.0	80	7
7/19/2	7/19/2011 15:17 SHE!	SHE	METAL	4	INTACT	BEIGE	HOBART ARMORY	_		00.	V 00 V	QC V
7/19/2	7/19/2011 15:18 CED INC		MOOD	Ω	POOR	BEIGE	HOBART ARMODY	$\overline{}$	SALING I			o G
7/19/2	7/19/2011 15:18/WALL	WALL	WOOD	$\neg$	INTACT	BEIGE	HOBART ARMODY	_	Nederine	0	8	000
7/19/20	7/19/2011 15:19 WALL	WALL	CONCRETE BLOCK		INTACT	BEIGE	HORART ARMODY	$\rightarrow$	Negative		8	0 0 v
7/19/26	7/19/2011 15-10 JA/AL	IAZALI	CONCRETE BLOCK		INTACT	BEIGE	HORAPT ABLADOV		Negative		800	00 v
7/19/2	7/19/2011 15-10 TAVALL	JAVA I	CONCRETE BLOCK	K	INTACT	BEIGE	HORAPT ABILIDAY	$\neg$	Negative < LOD		< LOD <	< 100
7/10/7	7/19/2011 18:30	Variation (	BRICK	60	INTACT	BEKOF	HOBADT ABIACAT		Negative	Ö		\$ 60 8
7/10/2	7/10/2011 62-24	VW-4.1.	DRYWALL	<	FAIR	BEIGE	HOBADT ABMORY	1.	Nagativo	<b>100</b> ×	~[00] ×	4.LOD
MONY	11 10.21	WALL	DRYWALL	_	FAIR	RFIGE	LICENTA ARMOR	<b>—</b>		007×	<u>2001</u> ×	001 v
ZMOMP	DAW 12:31 TUSKI //	WAL	DRYWALL	U	FAIR	REIGE	HOBARI ARMORY	. 1	Negative	V 007 >		000
MONS	7M0M044 47 00 1740	WALL	DRYWALL	0	FAIR		HODAY AKMOKY	_		001 v		00,00
74000	7/18/2017 10:22 DOOR	DOOR	METAL	4	FAIR		HOBAKI ARMORY	_	Negative	4 LOD > LOD		00.0
71000	77.61 11/	DOOR FRAME	METAL	4	FAIR		HOBAR! AKMORY	$\neg$	Negative	V 007 >		410D
719721	57.61 11	7/19/2011 15:23 WINDOW FRAME	METAL	4	FAIR	DED	HOBAR! ARMORY	NO ON	Negative	do] >		QO V
250	11 15:25	WISKENTT 15:25 CEILING SUPPORT	WOOD	: 4	INTACT		HOBART ARMORY	$\neg$	Negative	0.29		5
718420	7/18/2011 15:25 CEILING	CEILING	WOOD	[ 4	NTACT	אפרו	HOBART ARMORY		Negative	0.22	0.22	3 5
77 BYZL	1/18/2011 15:27 DOOR	DOOR	WOOD	:   -	MATA	VVTI (E	HOBART ARMORY		Negative	9	00 V	
7/19/20	11 1527	7/19/2011 15:27 DOOR FRAME	MOOO	2 0	INTACT		HOBART ARMORY	$\overline{}$	Negative	8	V 001 V	
77/01/1	1/18/2011 15:28 WAL	WALL	CONCRETE BLOCK	<del>,</del> –	IN LA		HUBAKI ARMORY	$\neg$	Negative	V 00 V	00 v	QC V
72/81//	7/19/2011 15:28 WALL	WALL	CONCRETE BLOCK		INTACT	BEICE	HUBARI ARMORY			V COD V	> 007 >	GOT v
74075	7/10/2011 13:68 WALL	WALL	CONCRETE BLOCK		INTACT	ACIDE L	LOBARI AKMORY		Negative	< 100 ×	> 00] >	QO V
7/10/20	1/40/201 10:23 WAL	WALL	DEYWALL		MTACT		TOBAKI AKMORY	_	Negative	> 007 >	V GOT ∨	410D
7/10/70	7/10/2011 (3.28 VVML)	A VALLE	DRYWALL	0	MTACT	PEIOE	LOBARI AKMUKY	$\rightarrow$	NUR	on:	V 007 ∨	QO V
7/10/20	7/19/2011 10:28 WALL	WALL	DRYWALL	B	INTACT	HE HE	LOBARI ARMORY	_	Negative	< LOD <	× (00) ×	8
7/10/2	7/10/2014 45:00 INTEL	AVAIL.	DRYWALL	٥	INTACT	BEIGE	HODARI ARMORY	-	Negalive	V 001 v	> (00) >	00 2
771020	7/10/2011 10:33 W/AL	VAL.	CONCRETE BLOCK		INTACT	PETCE PETCE	JOHAN ARMORY	$\neg$	Negative	<u>&gt;</u> 001 >	v 001 v	COLV
140mg	20.00	WALL	CONCRETE BLOCK		INTACT		TOBAK AKMORY	$\neg$	Negative < LOD < LOD	200		
1 a/20	7/19/2011 15:34 WALL	WALL	CONCRETE BLOCK		INTACT		HUBART ARMORY	. 1	Negative	V GOT V		
118/20	MALI 15:35 WALL	WALL	BRICK		N ACT	SEIGE	HOBART ARMORY	-		000		
02/61	1/18/2011 15:35 CENLING	CENTING	WOOD	2	17.14	BA.UE	HOBART ARMORY	$\overline{}$		1		
719/20	7/19/2011 15:35 CEILING	CELLING	WOOD	3 (	14 1AC	BLUE	HOBART ARMORY	$\overline{}$			y   v	

7/19/2011 15:36 DOOR	DOOR	Substrie	G		Color	250	Craw	1		ı	
11 15.3	7/19/2011 15:37 DOOR FRAME	MEIAL	<u> </u>	INTACT	WHITE	HOBART ARMORY	ROOM 46		200		M.
11 163	7/19/2011 16:38 DOOR EDAME	MEIAL	<	INTACT	BEIGE	HOBART ARMORY	DOCK 40	MEGBELINE	4 LOD	V 100	9
11 16.3	7/19/2011 15:39 DOOD EDAME	WE AL	0	FAIR	BEIGE	HOBART ARMORY	DOOM 644	I WEST THE	001	V (00) V	9
111163	7/19/2011 15:39 DOOD	MEIAL	0	FAIR	BEIGE	HOBART ARKORY	DOM WOOD	Negative		200	8
11 15.3	7/19/2011 15:38 DOOR	METAL	0	FAIR	BEIGE	HOBART ARMORY	SOOM STOCK	Negative	001		00
7/19/2011 15:41	CELLING	MEIA		FAIR	BEIGE	HOBART ARKIORY	POOM BY	NEGHINE	COL		9
11 154	7/19/2011 15:42 WWNDCW EDAME	MOOD		INTACT	GREEN	HOBART ARMORY	ROOM 9/10	Modeline	ינסט	Y COOL	9
11 15.4	7/19/2011 15:42 WINDOW SIE I	MEIAL	4	Poor	GRAY	HOBART ARMORY	ROOM 9/10	Magadina	6.0		
7/19/2011 15-43 WALL	WALL	BKICK	<	INTACT	WHITE	HOBART ARMORY	ROOM 9/40	Noorth	3 5	2000	00.
7/19/2011 15:43 WAI I	WAI I		<b>A</b>	INTACT	WHITE	HOBART ARMORY	ROOM 9/10	Namodino			
7/19/2011 15:44	LIMALI	ğ	6	INTACT	WHITE	HOBART ARMORY	ROOM 940	Nonnika		2017	V LOD
7/19/2011 15:44	I WA) I	のでは、日田田では、	اعا	INTACT	CON	HOBART ARMORY	ROOM BATO	N. III			Q0 V
7/19/2011 15:45 WAL	WALL	CONCRETE BLOCK	m	INTACT	RED CHA	HOBART ARMORY		Manager			8
7/19/2011 15:45/W/AI	WALL	CONCRETEBLOCK	U	INTACT	WHITE	HOBART ARMORY		Nogothe	000		9
11 15.4	7/19/2011 16:47 IDOOD	CONCRETE BLOCK D		INTACT	WHITE	HOBAR! ARMORY		Negative	Į.	0.18	
11 15.4	7/19/2011 15:47 DOOD EDAME	METAL	<b>4</b>	POOR	BEIGE	HOBART ARLIORY	ROOM 11	Monathan	7 2 2	0.12 < 1.00	3
11 45-4	7/46/2011 45:49 DOOR PRAME	METAL	٧	POOR	BEIGE	HOBART ARMORY	DOOM 44				8
7/10/20/11 13/40 DOOR	DOOR FRAME	METAL	ပ	P005	BEIGE	HORART APMODY		Megatiwe < 100			200
FOI 11	DOCK	METAL	U	FAIR	RIGH	MODAL ADION	2 200	Megative < LOD			100 100 100
C.01 LL	7118/2011 16:50 DOOR	METAL	U	FAIR	REIGE	THOUSEN THE PROPERTY AND THE PROPERTY AN	KOOM 11	Negative		> 007 >	å G
2 C L	WINZULL 15:50 DOOR FRAME	METAL	U	FAIR	DEIOT.	TOBOL MANCH	KOOM 13		< [OD <	> 007 >	2 2 8
17 15:5	WEST 15:51 WINDOW FRAME	WOOD	U	INTACT	WALITTE	HODARI ARMORY	ROOM 13	Negative .	< 100 < 100	907	007 v
11 15:5	// 18/2011 15:52 WANDOW SILL	MOON	20	INTACT	DINIK	LIOBART ARTICIES	KOOM 13	Negative	0.5	0.5	ol ^
11 15.5	WAZOTT 15:52 WINDOW FRAME	METAL	_	INTACT	PINK	UNDARKI ARMOKT	13 13	Negative	00	< [OD >	4.00 1.00
SCL LI	MUSICAL TESS DOOR	METAL		FAIR	BEICE	LICENT TOTOL	KOOK 13	Negative	ر ا	> 007 >	001 v
11 16:5	//19/2011 16:53 DOOR FRAME	METAL	Ţ	FAIR	BEICE	HODARI ARMORY	ROOM 14	Negative .	< LOD	> 007 >	007 v
7719/2011 15:58						HUDWAR AKINOKY	ROOM 14	Negative .	> 007 >	> 001 >	00,00
7/19/2011 15:57			T						2.87	0.59	0
7/19/2011 15:58			T			CALIBIKATE		Negative	0.9	60	-
/19/2011 15:58						CALIBRATE		Negative	80	80	-
11 16:02	7/19/2011 16:02   DOOR	METAI	T			CALIBRATE		Positive	-	-	-
11 16 C	7/19/2011 16:02 DOOR FRAME	METAI	3 0	74 K	BEIGE	HOBART ARMORY	ROOM 17	Negative	V 001 ∨	4100	LO U
7/19/2011 16:05	DOOR FRAME		Ť	FAIR	BENGE	HOBART ARMORY	ROOM 17	Negative		2012	3 5
11 18:0	7/19/2011 18:05 DOOR FRAME		2	TAIK	GRAY	HOBART ARMORY	ROOM 16	Negative			3 5
7/19/2011 16:05 DOOR	DOOR		T	FAIR	GRAY	HOBART ARMORY	ROOM 15	Negative	200		3 5
11 16:06	7/19/2011 18:06/CEILING			FAIR	GRAY	HOBART ARMORY	ROOM 15	Negative			3 6
7/19/2011 16:06 WALL	WALL	7	7	FAIR	WHITE	7	ROOM 15	Neverthee		3 2	3
7/19/2011 18:07 Wal I	Wal i			FAIR	WHITE		ROOM 15				3
7/19/2011 18:07	WAI			FAIR	WHITE	HOBART ARMORY	POOL 46	No. of		V COO	007
7/19/2011 18:07	WANT			FAIR	WHITE	HOBART ARMODY	SOOM IS				9
7/49/2011 18:00	1000		۵	FAIR	WHITE	_	200M 10	regative			60
7MQM214 48.00	100L			POOR	GREEN	_	TOOM IS	Negative		< LOD   <	COD.
	WALL		Γ	L	RFICE	LOBART ARMORT	KOOM 16	Negative	0.11	0.11	00 V
WAY 60:31 16:09 WAY	WAV	CONCRETE BLOCK	T	Ţ			ROOM 18	Negativa <	> 001 >	> 001 >	QO V
7/19/2011 18:10 WAL	WALL		T	NTACT			ROOM 16	Negative < LOD	5000		
7/19/2011 16:11 WAL	WALL		T		פבופב	HOBART ARMORY ROOM 16	ROOM 18	Medative < 100	100		

12.100000000000000000000000000000000000
4 LOD 4 LOD 6 1.05 0.07 0.05 0.05 0.07 0.07 0.07 0.07 0
Negative < Negative
ROOM 16 ROOM 16 ROOM 18 ROOM 3 ROOM 3
EID HOBART ARMORY HOBART ARMORY HOBART ARMORY HOBART ARMORY HOBART ARMORY CALIBRATE CALIBRATE
ST AR
SEED HOBART ARE HOBART ARE HOBART ARE HOBART ARE HOBART ARE HOBART ARE CALIBRATE CALIBRATE CALIBRATE CALIBRATE
WHITE WHITE
Condition INTACT FAIR FAIR INTACT INTACT INTACT
0 4 4 0 0 0 0
BERICK METAL METAL METAL BRICK
8 H Z Z H H
IN TRANS
WINDOW SI WINDOW FE WINDOW FE COOR WALL
0 3 3 6 6 8 8
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Tri 92011 77192011 77192011 77192011 77192011 77192011 77192011
271 744 746 746 746 746 746 746 746 747 747
18. Marie 19. Ma

APPENDIX E

## Performance Characteristic Sheet

SFFECTIVE DATE:

September 24, 2004

EDITION NO.: 1

## MANUFACTURER AND MODEL:

Make:

Niton LLC

Tested Model: XLp 300

Source:

109Cd

Note:

This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and

XLI 300A, XLI 301A, XLI 302A and XLI 303A. XLp 300A, XLp 301A, XLp 302A and XLp 303A. XLI 700A, XLI 701A, XLI 702A and XLI 703A. XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

## FIELD OPERATION GUIDANCE

## **OPERATING PARAMETERS:**

Lead-in-Paint K+L variable reading time mode.

## XRF CALIBRATION CHECK LIMITS:

0.8 to 1,2 ma/cm2 (Inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

if readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

## SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for: Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCOMCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	Substrate	THRESHOLD (mg/cm²)
Results not corrected for substrate blas on any substrate	Brick Concrete	1.0 1.0
	Drywail'	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

## BACKGROUND INFORMATION

## EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Tasting was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCl initial strength, and the other's was installed June 2004 with 40 mCl initial strength.

## OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

## SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-In-Paint K-L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate blas.

## EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Detarmine if the XRF testing in the units or house passed or falled the test by applying the steps below.

Compute the Refest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, than the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

## TESTING TIMES:

For the Lead-In-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the leating surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

	Tes	ing Times Us	ing K+L Readi	ng Mede (See	once)	-
		All Data			iboratory-measure (mg/cm²)	ed lead level
Substrate	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 <u>&lt;</u> Pb
Wood Drywell	4	11	19	11	15	11
Metal	4	12	18	g	12	14
Brick Concrete Plaster	8	16	22	15	18	16

## CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

## DOCUMENTATION:

A document titled Methodology for XRF Performance Characteristic Sheets provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.

## APPENDIX F

# Department of Environmental Quality

Three Cate Car

## ENERCON SVC INC

tias mu, the appendence of the Obligheria Lead-Base I Pans Management Act and Base I Pans Management Act and Base I Pans.

[FIRM]

Certification #: OKFIRM11152

Expires on: 3/31/2012 This confidence is taken from the date or a sension and expense as presented by Em.

Issued on: 4/1/2011

Environmental Programs Managér Air Quality Division



Air Quality Division Division Director



## MARSHALL BRANSCUM

## INSPECTOR

Certification #: OKINSR13415

Issued on: 4/4/2011

Expires on: 3/31/2012

Division Director Air Quality Division

Persolally Soldied

Environmental Programs Manager Air Quality Division

# Department of Environmental Quality

Bundaki Tu

## EMMETT MUENKER

has met the speceficerous of the Oblahom-Lank Based Plant Mangement Agand and the centrical as a Lank-Built Pame

# INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

The configure a valid from the date of research and opters a procedure by Law.

Issued on: 4/1/2011

Expires on: 3/31/2012

A Tall

Division Director Air Quality Division



Mindelle M. M. Environmental Programs Manager

Environmental Prog Air Quality Division

## EJENERCON

Excellence—Every project. Every day.

## ASBESTOS SURVEY REPORT

NATIONAL GUARD ARMORY 217 NORTH LINCOLN STREET HOBART, OKLAHOMA 73651

Enercon Project Number - ENMISC2393

August 8, 2011

Prepared for:

Okiahoma Department of Environmental Quality
Land Protection Division
PO Box 1677
Cklahoma City, Oklahoma 73101-1677
Attention: Wr. Dustin Davidson

Prepared By:
Enercon Services, Inc.
6525 North Meridian, Suite 400
Oklahoma City, Oklahoma 73116

Inspected By:

Richard D. Belcher

AHERA Asbestos Inspector OK-159310

Reviewed By:

Emmett W. Muenker

AHERA Asbestos Management Planner OK-MP130435

## **Table of Contents**

<u>SECTION</u>	PAGE	Ç
EXECUTIVE SUM	MMARYi	
1.0 INTRODU	CTION1	
2.0 SURVEY P	PROCEDURES1	
3.0 SURVEY R	ESULTS2	
4.0 CONCLUSI	IONS & RECOMMENDATIONS4	
<u>TABLES</u>		
Table 1 Summary	y of Asbestos Containing Building Materials	
Table 2 Bulk Mat	terial Samples & Laboratory Analytical Results	

## APPENDICES

- A Oklahoma Inspector and Management Planner Licenses
  B Site Layouts with Sample and Asbestos Locations
  C Laboratory Reports of Analyses/Chain of Custody

## ASBESTOS SURVEY REPORT

## NATIONAL GUARD ARMORY 217 NORTH LINCOLN STREET HOBART, OKLAHOMA 73651

## **Executive Summary**

An asbestos survey of the National Guard Armory, 715 North Lincoln Street, Hobart, Oklahoma was conducted on July 19, 2011. The armory consisted of a single building with a large drill room, an annex west of the drill room, plus an attached office wing located south of the drill room. During the survey, a total of 28 bulk samples were collected from 11 homogeneous areas. A summary of the asbestos-containing building materials (ACBMs) is provided below.

## Summary of Asbestos-Containing Building Meterials

MATERIAL CATEGORY	MATERIAL DESCRIPTION :	TOTAL ASTROCTMATE
FRIABLE	Domestic Water Line & Fitting Insulation Drywall Joint Compound	270 LF 800 SF
CATEGORY I NON-FRIABLE	Black Mastic Beneath Floor Tiles	430 SF
CATEGORY II NON-FRIABLE	Corrugated Transite® Roof	5,400 SF

SF=Square Feet; LF=Linear Feet; EA=Each

## Recommended actions for planned renovation:

Prepare specifications for abatement of friable and non-friable asbestos materials that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.

## Recommended actions prior to planned demolition:

Prepare specifications for abatement of all friable asbestos materials; solicit bids; award contract and complete abatement.

## Recommended actions for continued operation without removal of all asbestos in the building:

Prepare and implement an Asbestos Management Plan to manage the asbestos in place. This is to include Asbestos Awareness Training for maintenance and custodial personnel.

## ASBESTOS SURVEY REPORT

## NATIONAL GUARD ARMORY 217 NORTH LINCOLN STREET HOBART, OKLAHOMA 73651

## 1.0 INTRODUCTION

An asbestos survey of the National Guard Armory, 715 North Lincoln Street, Hobart, Oklahoma was conducted on July 19, 2011. The armory consisted of a single building with a large drill room, an annex west of the drill room, plus an attached office wing located south of the drill room. The inspection was performed by Richard Belcher, AHERA Inspector OK-159310 and Marshall Branscum, AHERA Inspector OK-159162. Appendix A contains a copy of their Inspector Licenses.

The purpose of the asbestos survey was to locate, identify, and quantify asbestos containing building materials (ACBMs) present in the facility. The asbestos survey was requested by the Oklahoma Department of Environmental Quality.

## 2.0 SURVEY PROCEDURES

The survey consisted of visual examination of building components and insulating materials to identify those suspected to contain asbestos. Asbestos-containing materials are divided into three basic groups: Thermal System Insulation (TSI), Surfacing Materials (SM) and Miscellaneous Materials (MM). TSI consists of insulating materials, mastics or scalants used to reduce heat loss or gain on mechanical systems such as piping, ducts, air handlers, boilers, flues, heat exchangers, etc. SM includes materials applied to surfaces other than mechanical systems for purposes such as fireproofing, acoustical insulation and aesthetic finishes. MM are all other materials not included in the other two categories, and include materials such as floor tiles, adhesives, gaskets, caulking compounds and asbestos-cement piping/panels (Transite<sup>®</sup>).

Non-friable ACBM is categorized as either Category I or Category II non-friable material. Category I non-friable ACBM includes packings, gaskets, resilient floor coverings, and asphalt roofing products. Category II non-friable ACBM includes any other non-friable material.

The protocols outlined in the Asbestos Hazard Emergency Response Act (AHERA) were used for this survey. The survey included all building materials that were suspected to contain asbestos, with the exception of the roofing components. Samples were analyzed by QuanTEM Laboratories, an analytical laboratory accredited under the National Voluntary Laboratory Accreditation Program (NVLAP). The analytical method used was Polarized Light Microscopy (PLM) with dispersion staining, as prescribed by the AHERA regulation. It is a method for positive identification of asbestos fibers. Materials determined to contain more than one percent asbestos by laboratory analysis are considered asbestos-containing materials.

İ

The numbering system used for sample identification consisted of three separate components, a facility identifier, a homogeneous area (materials appearing alike in their color, texture and function) number and a sample number.

Rooms in the building were not all identified with room numbers, therefore an arbitrary number was assigned to each room for referencing the locations of samples and asbestos-containing materials identified during the survey. These arbitrary room numbers are used throughout this report and the room locations are shown on the building layouts in Appendix B.

## 3.0 SURVEY RESULTS

A total of 28 bulk samples were collected from 11 homogeneous areas during the survey with one homogeneous area of Presumed Asbestos-Containing Material (PACM). Appendix B contains site layouts with sample and asbestos locations. Appendix C contains the laboratory reports of analyses/chains of custody.

A summary of asbestos containing building materials, including categorization and quantities, is presented in Table 1. Table 2 provides a summary of the bulk material samples collected, the general location of the materials sampled, the approximate quantity of asbestos-containing materials present in each homogeneous area and the laboratory analytical results.

Table 1

	Summary of Aspestos Containing Building	Materials
MATERIAL CATEGORY	MATERIAL DESCRIPTION	TOTAL APPROXIMATE
FRIABLE	Domestic Water Line & Fitting Insulation Drywall Joint Compound	270 LF 800 SF
CATEGORY I NON-FRIABLE	Black Mastic Beneath Floor Tiles	430 SF
CATEGORY II NON-FRIABLE	Corrugated Transite® Roof	5,400 SF
CE-Course Foot, I E	T 2 P	

SF=Square Feet: LF=Linear Feet

Table 2

There were the paulities of 1'800	ratory Analy	tical Results
DESCRIPTION & LOCATION	APPROX.	ASBESTOS TYPE/ PERCENT
Pressed Wood	NO	None Detected
Gypsum Board	NO	None Detected
Window Caulk	NO	None Detected
Kaylo Roof Deck	NO	None Detected
Domestic Water Pipe Fitting Insulation		10-20% Chrysotile, 15-20% Amosite
Domestic Cold Water Line Insulation	200 LF	15-20% Chrysotile
Domestic Hot Water Line Insulation	70 LF	10-15% Chrysotile, 10% Amosite
Tan Carpet Adhesive	NO	None Detected
White Wall Texture		None Detected
Drywall Joint Compound		3-4% Chrysotile
		None Detected
	430 SF	4-5% Chrysotile
		30%-40% Chrysotile
	Pressed Wood Gypsum Board Window Caulk Kaylo Roof Deck Domestic Water Pipe Fitting Insulation Domestic Hot Water Line Insulation Tan Carpet Adhesive	Pressed Wood NQ  Gypsum Board NQ  Window Caulk NQ  Window Caulk NQ  Kaylo Roof Deck NQ  Domestic Water Pipe Fitting Insulation NQ  Domestic Cold Water Line Insulation 70 LF  Tan Carpet Adhesive NQ  White Wall Texture NQ  Drywall Joint Compound 800 SF  Gray Floor Tiles  Black Adhesive Beneath Floor Tiles 430 SF

SF=Square Feet; LF=Linear Feet; EA = Each; NQ=Not Quantified; CS=Confirmation Sample

## 4.0 CONCLUSIONS & RECOMMENDATIONS

The asbestos-containing building materials present consisted of both friable and non-friable materials. The locations of these materials are shown on the layout in Appendix B.

## Friable Asbestos-Containing Materials:

- Domestic Hot and Cold Water Line and Fitting Insulation: Approximately 270 LF of piping insulation in good condition was present above ceilings and inside walls/chases.
- Drywall Joint Compound: Approximately 800 square feet of walls in Rooms 8 and 19 have asbestos-containing joint compound.

## Non-friable Asbestos-Containing Materials:

- Black Floor Tile Mastic: Approximately 430 SF of asbestos-containing black mastic was present beneath gray floor tiles in Rooms 13, 14 and 17.
- Corrugated Transite® Roof: The roof of the drill room consists of approximately 5,400
   SF of corrugated Transite® roof panels.

Recommendations for Friable Asbestos-containing Materials: The following recommendations are made for addressing friable materials. Disturbance of these materials is regulated by the Oklahoma Department of Labor.

- 1. Planned renovation and maintenance activities that could disturb friable asbestos: Prepare specifications for abatement that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.
- 2. <u>Planned demolition</u>: Prepare specifications for abatement of all friable asbestos materials; solicit bids; award contract and complete abatement.
- 3. Continued operation without abatement of friable asbestos: Prepare and implement an Asbestos Management Plan to manage the asbestos in place. This is to include Asbestos Awareness Training for maintenance and custodial personnel.

Recommendations for Non-friable Asbestos-containing Materials: The only non-friable asbestos present was black floor tile mastic located beneath non-asbestos floor tiles and the corrugated Transite® roof over the drill room. These materials containing asbestos are not regulated unless they are disturbed in a manner that renders them friable; however, if they are to be removed, removal must be done by workers who are properly trained to remove them. Removal of the floor tiles will disturb the mastic; therefore, both the tiles and mastic must be removed by properly trained personnel. The following actions are recommended for addressing non-friable materials:

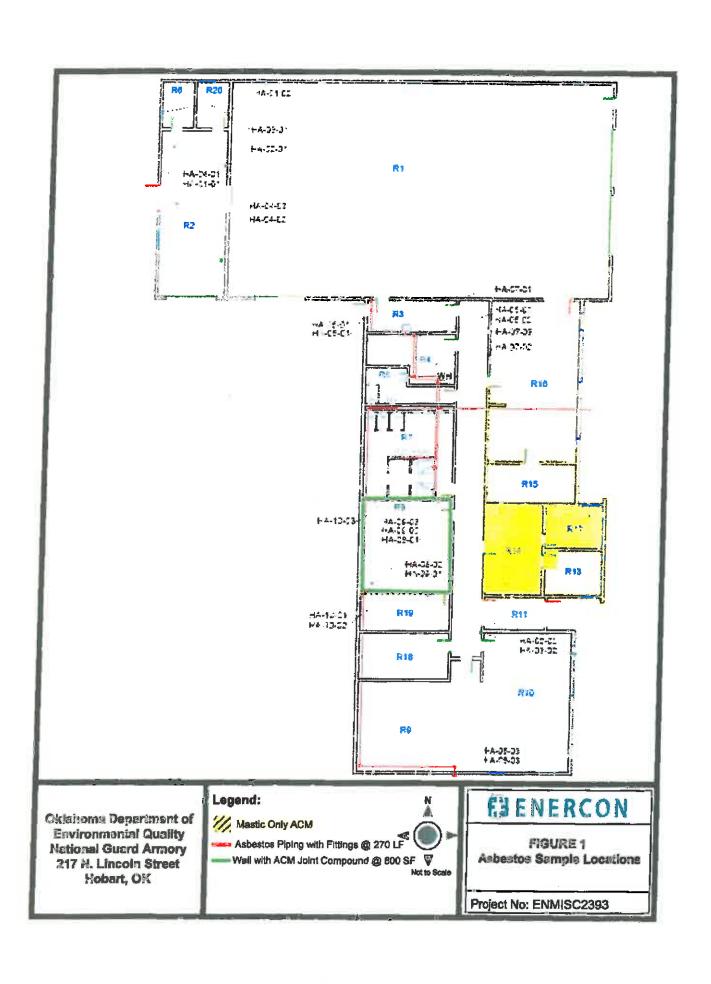
- Planned renovation: Prepare specifications for abatement of non-friable asbestos materials that would be disturbed during renovation activities; solicit bids; award contract and complete abatement.
- 2. <u>Planned demolition</u>: Non-friable materials present may remain in place during demolition activities and may be disposed as ordinary demolition/construction waste.
- 3. Continued operation without abatement of remaining asbestos: Prepare and implement an Asbestos Management Plan to manage the asbestos in place. This is to include Asbestos Awareness Training for maintenance and custodial personnel.

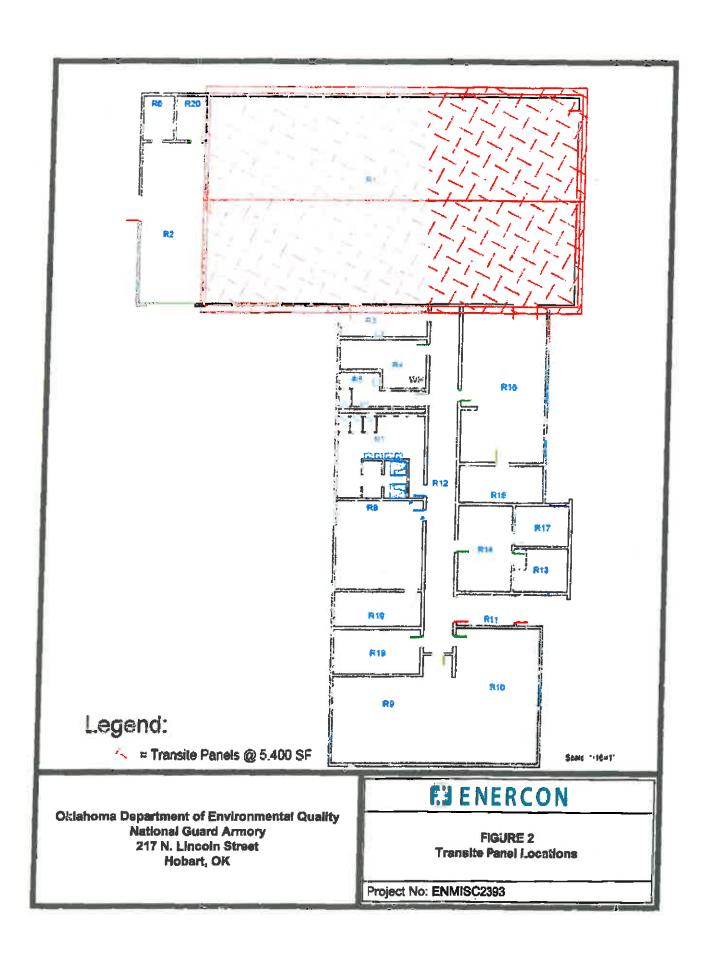
## APPENDIX A





## APPENDIX B





## APPENDIX C



## 2033 Heritage Park Drive / Oldehoma City, OK 73120 / (405) 755-7272 / Fex (403) 755-2038

## Polarized Light Microscopy Asbestes Analysis Report

QuanTEM Lab No. 197791

Account Number:

A845

Date Received:

07/20/2011

Received By:

CaCelin Van Eck

Date Analyzed:

07/20/2011

Analyzed By:

Gayle Ooten

EPA/600/R-93/116

Client:

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Oklahoma City, OK 73116

Project:

Hobert Armory REVISED

Project Location: Project Number:

N/A

217 N. Lincoln

Methodology:	EPA/60	D/R-93/116		Project Number: N/A		
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
901	HA-1-01	Homogeneous	Brown Fiberboard	Asbestos Not Present	Callulose 95	Binder
002	HA-1-02	Homogeneous	Brown Piberboard	Asbestos Not Present	Cellulose 95	Binder
003	<b>HA-2-0</b> 1	Homogeneous	White Sheetrock	Asbestos Not Present	Celhilose 20	Gypsum
004	HA-2-02	Homogeneous	White Sheetrock	Asbeston Not Present	Cellulose 8	Gypsun
005	HA-3-01	Homogeneous	Gray Window Glazing	Ashestos Not Present	NA	CaCO3 Binder
COS	HA-3-02	Homogeneous	Gray Window Glazing	Asbestos Present Chrysotile <1	NA	CaCO3 Binder

Unless otherwise noted, epon receipt the condition of the sample was acceptable for enalysis.

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101939-0). This report refuses only to the specific items tested. NVLAP accreditation applies only to enalysis performed utilizing EPA/500/M4-82-020 and EPA/500/R-93/116 methods. This report may not be used to claim product andersement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



2033 Heritage Park Drive / Oktahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

## Polarized Light Microscopy Asbestes Analysis Report

QuanTEM Lab No. 197791

Account Number:

A845

Date Received:

07/20/2011

Received By:

CeCelia Van Eck

Date Analyzed:

07/20/2011

Analyzed By:

Methodology:

Gayle Ooten

EPA/600/R-93/116

Client:

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Oklahoma City, OK 73116

Project:

**Hobert Armory REVISED** 

Project Location:

217 N. Lincoln

Project Number: N/A

	50					
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
007	HA-4-01	Homogeneous	White Ceiling	Asbestos Not Present	Cellulose 1	O Gypsum Perlite Binder
008	HA-4-02	Homogeneous	White Calling	Asbestos Not Present	Cellulose 1	Gypsum Perlite Binder
009	HA-4-03	Homogeneous	White Ceiling	Asbestos Not Present	Cellulose 12	. Gypsum Perlite
010	HA-5-01	Homogeneous	Gray Pipe Pitting	Anbestos Present Chrysotile 20 Amosite 20		CaCO3 Binder
031	HA-5-02	Homogeneous	Cream Pipe Insulation	Asbestos Prescut Amosite 15	NA	CaCO3 Binder
012	HA-5-03	Homogeneous	Gray Pipe Insulation	Ashestos Present Chrysotile 10 Amostte 15	Glass Fiber 10	CaCO3 Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-52-020 and EPA/600/R-93/116 methods. This report may not be used to delim product endorsement by NVLAP or my other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



## 2033 Harikaga Park Drive / Oklahoma City, OK 78120 / (403) 755-7272 / Fax (405) 755-2050

# Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 197791

Account Number:

A845

Date Received:

07/20/2011

Received By:

CeCelia Van Eck

Date Analyzed:

07/20/2011

015s

Client:

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Oklehoma City, OK 73116

Project:

Hobart Armory REVISED

	Analyzed By: Methodology:	Gayle O			Project Location: Project Number:	217 N. I N/A	Lincoln		
•	QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)		Non-Asbestos Fiber (%)		Non Fibrous
	013	HA-6-01	Layered	Brown/White Pipe Insulation	Asbestos Nut Pres	ent	Cellulosc	85	'Paint Binde:
	013a		Layered	Black Pipe Insulation	Asbestos Presen Chrysotlie	20	Celhalosc	<1	Tar Binder
	014	HA-6-02	Layered	Brown/White Pipe Insulation	Asbestos Not Pres	<u>ent</u>	Cellulose	85	Paint Binder
	014s		Layeres	Black Pipe Insulation	Asbestos Presen Chrysotile	15	Cellulose	5	Tar Binder
	015	HA-6-03	Layered	Brown/White Pipe Insulation	Asbestos Not Press	नां	Calluiose	85	Paint Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Asbestos Present

Chrysotile

15

Black

Pipe Insulation

Layered

QuanTEM is a NVLAP accredited TEM and PLM inheratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to smalysis performed utilizing EPA/600/M-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

Cellulose

10 Tar

Binder



# 2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fox (403) 755-7038

# Polarized Light Microscopy Asbestos Analysis Report

Enercon Services, Inc. Client: QuanTEM Lab No. 197791 6525 N. Meridian, Suite 400 A845 Account Number: Oklahoma City, OK 73116 07/20/2011 Date Received: CeCelie Van Eck Received By: Hebert Annory REVISED

Project. 07/20/2011 Date Analyzed:

217 N. Lincoln Project Location: Analyzed By: Gayle Ooten

Project Number: N/A Methodology. EPA/600/R-93/116

Methodology:	EPA/60	O/R-93/116		riujeci Mainet.	IA/V			
Quan TEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	<del></del>	Non-Asbestot Fiber (%)	'	Non Fibrous
<del></del>			:			•		
016	HA-7-01	Layered	White	Asbestos Present		Cellulose	3	CaCO3
010			Pipe Wrap	Chrysotile Amosite	2 10	Glass Fiber	20	Biader
016a		Layered	Erown Pipe Insulation	Asbestos Not Presen	t	Cellulose	95	Binder
0166		Layered	Black Pipe Insulation	Aabestos Present Chrysotile	15	Cellulose	8	Tar Binder
017	HA-7-02	Homogeneous	White	Asbestos Present		NA		CaCO3
VII	222		Pipe Insulation	Chrysotile Amosite	2 10			Binder
				ALIIOSIUS	10			
018	HA-7-03	Homogeneous	White	Asbestos Present		NA		CaCO3
010			Pipe Insulation	Chrysotile Amosiic	10 10			Binder
019	HA-8-01	Homogeneous	Tan Carpet Mastic	Asbestos Not Present	t	NA		Glue Binder

Unless otherwise noted, upon receipt the condition of the sample was secoptable for analysis.

QuantEM is a NVLAP socretized TEM and PLM inhoratory (Lah Code: 101959-0). This report relates only to the specific items tested. NVLAP secretization application to manysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorscenant by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



## 2033 Hurliaga Park Drive / Oklahoma City, OK 73120 / (465) 755-7272 / Fex (405) 755-2058

## Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 197791

Account Number:

A845

Date Received:

07/20/2011

Received By:

CeCelia Van Eck

Date Analyzed:

07/20/2011

Analyzed By:

Gayle Ooten

Methodology:

EPA/600/R-03/116

Octon

Project:

Client:

Hobert Armory REVISED

217 N. Lincoln

Enercon Services, Inc. 6525 N. Meridian, Suite 400

Otlahoma City, OK 73116

Project Location:

DT/A

Methodology:	EPA/60	O/R-93/116		Project Number: N/A		
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Pibrous
020	HA-8-02	Homogeneous	Tan Carpet Mastic	Asbestos Not Present	NA	Giue Binder
021	HA-9-01	Homogeneous	White Wall Texture	Asbestos Not Present	Callulose <1	CaCO3 Paint
022	HA-9-02	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Paint
023	HA-9-03	Homogeneous	White Wall Texture	Asbestos Not Present	NA	CaCO3 Point
024	HA-10-01	Homogeneous	Tan Joint Compound	Asbestos Present Chrysofile 4	NA	CaCO3 Binder
025 1	HA-10-02	Homogeneous	Tan Joint Compound	Asbestos Present Chrysotile 3	NA	CaCO3 Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP according TEM and PLM inhoratory (Lab Code; 101959-0). This report relates only to the specific items tested. NVLAP sucreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the Inhoratory.



# 2033 Heritage Park Drive / Oklahoma Chy, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

# Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 197791

LYITY

Account Number: A8

A845

Date Received:

07/20/2011

Received By:

CeCella Van Eck

Date Analyzed:

07/20/2011

Analyzed By:

Gayle Octen

Methodology:

EPA/600/R-93/116

Client:

Engroon Services, Inc.

6525 N. Meridian, Suite 400

Oklahoma City, OK 73116

Project:

Hobert Annory REVISED

217 N. Lincoln

Project Location: Project Number:

N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestus Fiber (%)	Nan Fibrous
026	HA-10-03	Нотподеления	Tan Joint Compound	Asbestos Present Chrysotile 4	NA	CaCO3 Binder
027	HA-11-0}	Layered.	White Floor Tile	Asbestoe Not Present	NA	Vinyl CaCO3
027a		Layered	Black Maștic	Asbestos Present Chrysotile 5	Cellulose <1	Tar
028	HA-11-02	Layered	White Floor Tile	Asbestos Not Present	NA	Vinyl CaCO3
028a		Layered	Black Mastic	Asbestos Present Chrysotile 4	NA.	Tar

Gayle Ooten, Analyst

7/21/2011 Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for energyin.

QuanTEM is a NVLAP accredited TEM and FLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed religing EPA/600/M4-02-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the varietien approval of the inhomatory.



# ASBESTOS CHAIN OF CUSTODY

2033 Herlingo Park Drive, Oldahoma Chy, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Farc (405) 755-2058

Page 1 of Z

	Labrico   97,201	Total Company	E7 QuanTEM Wellscha			7		Table 12:10			Resh	Seme Day	N Hour														
• Far: (405) 755-2058	IT LEGIBLY		.39	181				Proposition vancer			Buth Presence / Absence Ethiopia 99/16	Bulk-Oxinctionive (weighths)-Oxinited	Dust-Proteine / Absence	Duck- Custainaing Miteralog comp. ASTM D5755	Orber												
(800) 522-1650 • (405) 755-7272 • Fax; (4	HENT - PLEA		22-2693	Project Lycalion 7	Projection	11-9/4 Comp	10:00				W-W-W	AND MARKET MARK	Ar-50 1812	Carlo Water-BW 1002	Whate Water BA 600/4-63-043	- Unit Quiyen (		Costa War	"		11.1	D 42 Miles	0	Security - Land		J	मार सामान ३ मा व
LABORATORIES			Phane	Col Phone	- 11	MLB					]	Orber			MOSH 7/409		Res		17.77		[] (M\$/less /-		4.1.6	1	7	V. C	A Householder
LABORA	www.QuanTEM.com			A.Chach			The Wood of		· · · · · · · · · · · · · · · · · · ·	Analysis (27)	did Point Court	1000 Peint Causa	Gravinettic Preparetion	Partide ID			10/-191	2 1 -1-02	3 -2-01	4 -2-02	5 -3-0	6 -3-CL	7 -4-0	8 -402	3 -4-03	10 4-5-01	SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE



# **ASBESTOS CHAIN OF CUSTODY**

2033 Hertrage Park Drive, Oklahome City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 » Fax (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Page 2 of 2

Lab No. 197391

	Projections A. A. A.		Cay Cay	Pito Lock Loc			Be 1664 P. 10 1.6.1 1. 3" - 4" 1. 11.	-		the total Martin	Called Chearific	1.1 1.25.10			77.7			1. W. 101. 6 W. 1			
		1		Reserve		4	Be 144 Pro 1.	-	2	Para tilke 7.		1.11.1		2	1.1.2.18. T		3	Gray The			
Tologo and the second s	Company: State Con-	1/4-5-02 X			-6-62	-6-03	-7-6/	7-0-2	-7-03	-7-6	-3-02	-9.01	70-6-	-9-03	70-0/-	-10.01-	CO		-1-02 D		
	Comp	Ξ	12	m	7	5	92	11	18	6	20	21	22	2	2	n	97	27	28	8	읈

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE · O Une this address for Semely AZZON. Same Prince, Oklahoma CRy, CK 73105-4517 · Mark Princes "Hold for Semelay Picture"

# Scope of Work

## STATEMENT OF WORK

#### For

## Remediation of Lead and Asbestos Contamination at Hobart Armory

The Oklahoma Department of Environmental Quality (DEQ) is requesting bids from qualified bidders for remediation services at a former National Guard armory located in Hobart, Oklahoma. This statement of work (SOW) describes the cleanup of lead contaminated dust, abatement of lead-based paint, and removal and proper disposal of asbestos containing material. This work must be performed to provide for safe re-use of the facility with unrestricted use such as storage areas, classrooms, or office space. A mandatory site visit and walk through will be held to give a better understanding of the site. A floor plan map of the Hobart Armory is attached for review (Attachment 1).

The building is located at 217 North Lincoln Street, Hobart, Oklahoma 73651. The building does not have available water and electricity to use during remediation.

### **SPECIAL PROVISIONS:**

- 1. Work Schedule: The Contractor shall schedule all work to be complete within ninety (90) calendar days after date of the written "Notice to Proceed".
  - a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Scope of Work and answer any questions the contractor may have.
  - b. All on-site work shall be completed by the Contractor five (5) days prior to the scheduled contract completion date, with the remaining five (5) days utilized for final inspection and correction of all deficiencies.
- Conditions of Work: The following conditions of work will apply in accomplishment of this contract:
  - a. All work shall be performed in accordance with all applicable State and Federal regulations.
  - b. The contractor shall perform this work in such a manner as to cause a minimum of interruption to normal work being performed in the contract area.
  - c. Coordination of work areas shall be scheduled with DEQ.
  - d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

#### CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through;
- Posses a current lead-based paint firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Posses a current Oklahoma Department of Labor (ODOL) Asbestos Abatement Contractor License or have a licensed sub-contractor in order to perform asbestos abatement;
- Foliow all appropriate OSHA requirements;
- Follow OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for lead-based paint abatement, indoor firing range remediation, and lead dust remediation;

## Submit With Bid:

- Copy of lead-based paint firm license;
- Copy of lead-based paint supervisor license;
- Copy of ODOL Asbestos Abatement Contractor License
- Three references with name, type of project, phone number, and location of similar work in the last three years:

## Submit After Contract Award:

A Work Plan with planned activities and schedule to DEQ for approval;

# SEQUENCE OF EVENTS

The remediation of the building shall be as follows:

- 1. First The asbestos and lead-based paint abatement shall be completed.
- Second Enercon Services Inc. shall be contacted to confirm all asbestos has been appropriately removed and DEQ shall be contacted to confirm all lead-based paint abatement has been appropriately performed.
- 3. Third All floors of the entire building shall be cleaned;
- 4. Fourth—DEQ shall be contacted to perform third party confirmation sampling to confirm all floors have been appropriately remediated.

# ASBESTOS ABATEMENT INSTRUCTIONS

- Non-friable and/or non-regulated Asbestos Containing Material (ACM) shall be removed as described in the attached Specifications for Removal of Non-Friable Asbestos (Attachment 2). Below is a list of non-friable and/or non-regulated ACM along with instruction to remove or leave in place:
  - Remove 430 SF of black adhesive mastic beneath floor tile located in Rooms 13, 14, and 17.
  - o Do Not Remove corrugated transite roof located in Drill Floor.
- Friable and regulated ACM shall be removed as described in the attached Asbestos
  Abatement Project Design (Attachment 2).
- For more details see the attached Hobart Armory Asbestos Inspection Report with floor plan map showing locations of ACM (Attachment 2).
- Once Asbestos Abatement is complete, Enercon Services Inc. shall be contacted to confirm
  abatement has been appropriately performed and all asbestos has been removed.

# LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

See Survey and Assessment for Lead in Paint and Settled Dust Report for details (Attachment 7)

## 1. Non-Friction and Non-Impact Surfaces

- All items listed below shall be wet scraped, painted with a neutral colored primer, and encapsulated with DEQ approved elastomeric encapsulant. A list of DEQ approved elastomeric encapsulants is attached (Attachment 4). Encapsulant shall be a minimum of 20 mils thick. The Lead-Based Paint and Settled Dust Sampling Report with floor plan maps detailing the locations of the lead-based paint is attached for review (Attachment 7);
  - All walls and ceilings of Rooms 2, 6, and 20
  - The painted brick wall in Room 3
  - All overhead door frames
  - All wood beams above bay windows in Room 1
  - All overhead door guards
  - All interior and exterior window and door lintels in Rooms 1,2,6, and 20
  - All wood window trim and window sills in Rooms 1,2,6, and 20
  - The door frame and door lintel located between Room 1 and Room 2
- All baseboards and wood trim from Rooms 2, 6, and 20 shall be removed, wrapped in 6 mil poly sheeting and properly disposed.
- o The sliding door and track located between Room 1 and Room 2 shall be removed, wrapped in 6 mil poly sheeting, and properly disposed.
- Deteriorated paint removed from building surface will be properly disposed.

## 2. Friction and Impact Surfaces

## A. Windows

- A Window-Scope of Work with map, window measurements, specifications for window replacement, and specific details on abatement requirements for each window is attached (Attachment 5):
- Windows installed must meet all attached specifications;
- Window installation and oversight of window removal shall be performed by a third party professional window installation company that is certified and recommended by the window manufacturer of the windows being installed:
  - Window installer shall have no less than five (5) years installation experience;
- Window installer shall have experience with removal of steel casement windows;
- All interior and exterior window sills shall be HEPA vacuumed and wet washed after windows have been removed and replaced;
  - Once window sills have been cleaned, contractor shall encapsulate with DEQ approved lead-based paint encapsulant.

### B. Doors and Frames

A Door-Scope of Work with map, door measurements, and specific details on abatement requirements for each door is attached (Attachment 6);

If door frames are wood, Door frames will be replaced with Steelcraft F16 and F14 - Series Flush Frames (Specifications Attached) or equivalent;

If door frames are metal, Doors will be replaced with pre-hung Steelcraft Commercial Replacement Door Units (Specifications Attached) or equivalent;

Doors will be replaced with UL listed 90 minute standard metal doors;

 Doors will be replaced with Steelcraft L18 and L16 - Series Honeycomb Doors (Specifications Attached) or equivalent;

Contractor must submit product data for approval if different from doors or door

frames in bid package:

Replacement doors and frames must meet all compliance and fire rating requirements in the attached specifications;

### a. Exterior Doors

 Exterior doors will be replaced with galvannealed, 16 gage, honeycomb core insulated doors;

O Hinges: As manufactured by Hagar or approved equal — Plain Bearing - Standard Weight 1279 NRP, 4 ½ X 4 ½ (Specifications Attached);

 Threshold: As manufactured by National Guard Products or approved equal – 426E (Specifications Attached);

 Weather Strip: As manufactured by National Guard Products or approved equal — 160VA (Specifications Attached);

 Lever: As manufactured by Schlage or approved equal – D Series "Rhodes", 626 finish, function ND60PD (Specification Attached);

o Keying: All doors to be keyed alike;

o Provide sealant per 07920 specification attached.

## b. Interior Doors

o Interior doors will be replaced with non-galvannealed, 18 gage, honeycomb core insulated doors;

O Hinges: As manufactured by Hagar or approved equal – Plain Bearing – Standard Weight 1279, 4 ½ X 4 ½ (Specification Attached);

 Knob: As manufactured by Schlage or approved equal – A Series "Orbit", 626 finish, function A10S (Specification Attached);

Provide sealant (caulking) per 07920 specification attached.

# 3. Sampling and Disposal

- O DEQ assumes that all lead-based paint chips removed from surfaces are considered hazardous waste. Lead-based paint removed from surfaces shall be disposed as hazardous waste.
  - If Contractor uses a paint stripper that exhibits a characteristic of hazardous waste, or contains hazardous waste constituents, it is the Contractor's responsibility to characterize this waste under 40 CFR 262.11 and if they are determined to be hazardous waste, disposing of them as such. The Final Report shall contain all relevant information regarding the waste determination.
  - A completed and signed waste manifest, Land Disposal Notification Form, and Certificate of Disposal demonstrating that the paint chips were properly disposed at a hazardous waste facility must be included in the Final Report.

# LEAD DUST REMEDIATION INSTRUCTIONS

See Survey and Assessment for Lead in Paint and Settled Dust Report for details (Attachment 7)

## 1. Lead Dust Remediation (See Attachment 7)

- O Surfaces above the floors such as walls, shelves, etc. may have accumulated dust that has settled. This accumulation shall be removed prior to the cleaning of the floors. This shall be done to prevent recontamination of the floors after they are cleaned.
- o Floors of the entire building shall require lead dust remediation;

Remove dust from all equipment, shelving, trash, etc, and remove these items from room before remediation begins;

Remove dust from all carpet, remove carpet from rooms, and dispose of all carpet as non-hazardous waste before lead dust remediation of floor begins;

 Dispose any materials, determined by the DEQ to be trash, as nonhazardous waste;

HEPA vacuum and wet wash floors of entire building;

o Lead levels on the floor are high in many areas of the building and lead contaminated dust may be ground into the pores and cracks of the concrete. If may be necessary to clean floors several times or use alternate cleaning methods after HEPA vacuuming and wet washing to remove the lead dust from the concrete and get the lead levels down to 40 micrograms per square foot (ug/SF).

 Contact Enercon Services to perform post remediation wipe sampling to confirm that room floors with lead contamination have been appropriately remediated to 40 micrograms per square foot (ug/SF): See Section C (Confirmation and Clearance Sampling) for additional information;

Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF.

 Lead dust and appropriate cleaning materials shall be disposed as appropriate.

Wash Water Disposal

 All wash water from the building shall be filtered through a I micron filter and stored on site in containers;

o The wash water will be sampled for total lead and total phosphorus; Total lead shall be run by ICP and total phosphorus shall be run by EPA Method 365.3;

 Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility;

Wash water shall be disposed appropriately.

## 2. Disposal of Materials

## Hazardous Waste

- Lead contaminated dust from the cleaning of the building shall be disposed as hazardous waste;
- Wash water filters shall be disposed as hazardous waste;

### Other

- Poly Sheeting shall be disposed as appropriate. If contractor plans to dispose as non-hazardous waste, best management practices such as vacuuming, washing, wiping down, or cleaning poly sheeting prior to disposal shall be implemented.
- Personal protective equipment (gloves, tyvec, face masks, etc.) shall be disposed as appropriate.
- Mop heads, towels, brushes, wipes, and other cleaning supplies shall be disposed as
  appropriate. If contractor plans to dispose as non-hazardous waste, best management
  practices such as vacuuming, washing, wiping down, or cleaning prior to disposal shall
  be implemented.

# 3. Confirmation and Clearance Sampling

- Contractor may use his own lab to check progress of remediation, however all DEQ decisions shall be based on analytical data from samples taken by Enercon Services Inc.
- Department of Environmental Quality (DEQ) will be responsible for taking all post remediation samples.
  - DEQ shall be notified five (5) days prior to each sampling event.
  - Contact Information: Department of Environmental Quality

Contact: Dustin Davidson Phone: (405) 702-5115

Email: Dustin.Davidson@deq.ok.gov

- The third-party sampling shall not be included in the contractors base bid
- All post remediation sampling will be performed after all initial abatement, remediation, and cleaning is complete.

# **FINAL REPORT**

- Write final report and submit to DEQ;
  - o Final report shall include asbestos and lead-based paint abatement;
- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - sample results;
  - waste manifests; and
  - photo documentation of work;
    - Photo documentation of work will have color digital photos with captions describing photo;
      Photos will show before and after photos of work completed.
- Final report will be submitted in hard copy and electronically on disc.

**Dustin Davidson** 

Oklahoma Department of Environmental Quality

Land Protection Division

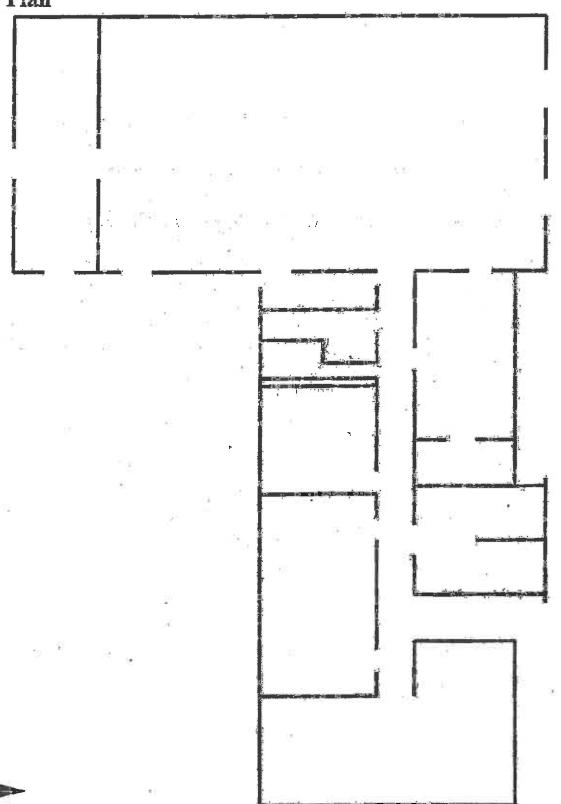
707 N. Robinson Oklahoma City, OK 73102 (405) 702-5115 (Office)

(405) 702-5101 (Fax)

# ATTACHMENT 1

# Hobart Armory Floor Plan Map

# Hobart Armory - 1949 Floor Plan



Floor plan not drawn to scale

# **ATTACHMENT 2**

Hobart Armory Asbestos Project Design

Hobart Armory Asbestos Scope of Work

Hobart Armory Asbestos Inspection Report



DEC 1 9 2011

## ASBESTOS ABATEMENT PROJECT DESIGN HOBART ARMORY HOBART, OKLAHOMA

I AND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

A. INTRODUCTION: This Project Design was prepared by Enercon Services, Inc., in order to provide a prudent course of action for handling of asbestos abatement of piping and drywall joint compound in the Hobart Armory. Protocols to be used are to protect abatement workers from exposure to airborne asbestos fibers during the work being performed. The building is unoccupied and will remain so until completion of the project.

## B. PROJECT INFORMATION:

- 1. Project Name: Asbestos Abatement, Hobart Armory
- 2. <u>Description of Work/Occupancy:</u> The work addressed herein involves glove-bagging of line and fitting insulation on piping and drywall joint compound abatement in the Hobart Armory.
- 3. <u>Project Type:</u> Renovation.
- 4. Abatement Contractor: To be determined by bid.
- 5. <u>Industrial Hygiene/Air Monitoring Firm:</u> To be determined by abatement contractor.
- 6. Analytical Laboratory: To be provided by abatement contractor.
- C. REGULATORY COMPLIANCE (1): The specific governing regulations affecting this work include, but are not limited to, 29 CFR 1926.1101 (OSHA Construction Industry Asbestos Standard), 29 CFR 1910.134 (OSHA Respiratory Protection), 40 CFR 61, Subpart M (Asbestos NESHAP) and OAC 380:50 (Oklahoma Rules for Abatement of Friable Asbestos). Waste transport and disposal is to be performed by an Oklahoma-licensed asbestos waste transporter with a waste disposal manifest/chain of custody signed by the receiving landfill. DOT Class 9 placards are to be displayed during transportation of asbestos waste.
- D. WORK SEQUENCING/SCHEDULING (2): The work in the Hobart Armory is to be done in a single phase with two sequential tasks. The work is to be scheduled by the abatement contractor in coordination with Enercon Services and the Department of Environmental Quality. The work is expected to be planned for 10-hour work shifts on weekdays during normal work hours.
- E. EGRESS AND FIRE PROTECTION (3): In the event emergency evacuation is necessary, the primary exit will be to exit the work area through the decon then through the nearest exit to the outside of the building. There are multiple exits available for secondary exits. Workers will be briefed on the available exit paths, emergency procedures and the assembly point at the beginning of the work shift. No special fire protection measures are required. One 10#ABC fire extinguisher will be placed inside the work area and one set at the decon. The work area extinguisher will be kept in the vicinity of the work crew.

## F. MATERIALS TO BE ABATED (4):

- 1. <u>Description:</u> The material to be abated is line and fitting insulation on piping throughout the building and drywall joint compound in Rooms 8 and 19.
- Amount. Location and Type of Asbestos-Containing Materials (ACM): There is approximately 270 linear feet of piping insulation with fittings to be abated. The piping and fitting insulation contains from 2-20% Chrysotile and 15-20% Amosite. Approximately 800 SF of drywall with joint compound will be removed. The joint compound contains 3-4% Chrysotile. The laboratory report is attached.

## G. ASBESTOS ABATEMENT METHODS (5):

Task 1: Line and fitting insulation will be removed within critical barriers using glove-bag procedures with an attached decon and load-out. Removal of approximately 500 SF of Styrofoam ceiling tiles for piping access will be necessary prior to prep and hanging of glove-bags. Demolition of portions of the restroom chase wall and walls with piping inside will be necessary for access to piping serving fixtures in the restrooms. Demolition will be done during prep with care taken not to disturb the piping. Poly drop cloths will be placed on the floor beneath the piping during installation of glove-bags and during glove-bagging. The decon and loadout will be will be erected at the double doors into the drill room. Refer to the attached layout. A 600-800 CFM air filtration device (AFD) will be attached to the decon and exhausted out a nearby doorway. Bagged waste may be stored temporarily on a drop cloth in a convenient location inside of the work area awaiting loadout into a waste container. At the end of the work shift or when sufficient waste has accumulated for loadout, the waste will be removed from the storage area and loaded into a poly-lined disposal trailer/van.

Task 2: The drywall joint compound will be removed from Rooms 8 and 19 by removing the drywall. The piping in these two rooms may be done by gross removal in containment (or by glove-bagging in Task 1) at the contractor's discretion. Approximately 600 SF of Styrofoam ceiling tiles and metal grid will be removed for access to the upper walls and the piping located above the lay-in ceiling. The ceiling tiles are to be removed and stacked in the room across the corridor for re-installation by others. The grid is to be removed and disposed as ordinary uncontaminated waste. Light fixtures and other ceiling-mounted items will be secured to the roof trusses and wrapped in poly during prep. Critical barriers will be installed over windows and above the top of the wall between Room 19 and Room 18. Two layers of 6-mil floor poly will be installed. A double layer of wall poly will be installed over the three walls in Room 19 that are not being abated. The volume of the abatement area is approximately 6,300 cubic feet. One 1200-1,500 CFM air filtration device will provide more than eleven air changes per hour and will be ducted to the outside through a window and will provide air flow through the decon. An attached decon and loadout will be erected in the hallway (see attached layout). Insulation inside the wall cavities will be removed and bagged for disposal as contaminated waste. The bagged waste may be stored inside the work area awaiting loadout. The inside of the containment will be locked down following the visual inspection.

ASBESTOS AIR MONITORING/RESPIRATORY PROTECTION (6-8): All prep work except hanging of glove-bags may be done unprotected. Full-body protective clothing and full-face APR with HEPA-cartridges will be worn during abatement. Full-body protective clothing and minimum half-face APR will be worn during handling and loadout of the double-bagged waste.

Personal air samples will be collected on a minimum of two workers or 25%, whichever is greater, during work requiring respiratory protection. One inside area air monitor will be placed inside each task work area while abatement is in progress. One area monitor will be set outside the decon clean room for each task during abatement and one will be placed along the loadout path during load-out for each task. The AFD for Task 1 will be exhausted outside through a doorway and for Task 2 through a window and the exhausts will be monitored. Piping abated will be locked down under Task 1 and the interior of the containment will be locked down following the visual inspection for each task using a tinted lockdown encapsulant or spray paint.

Five 1,200 liter PCM clearance samples will be collected in each task work area following the visual inspection; approximate locations are noted on attached layout.

I. LABORATORY CERTIFICATIONS: The laboratory to be used for analysis of personal and area asbestos air samples will determined by the abatement contractor. All air samples will be collected by an experienced Asbestos Air Monitoring Technician qualified to collect and analyze air samples in Oklahoma.

## J. CONTAINMENT METHODS (9):

Task 1: Critical barriers and a drop cloth beneath the piping during glove-bagging will be used. Rolling scaffolding or ladders will be used as necessary to access the piping. Workers will be briefed by the supervisor regarding relevant safety issues associated with the work at the beginning of each work shift. Asbestos barrier tape will be used as necessary to demarcate the regulated area. All electrical circuits within arm's reach of the glove-bags will be shut off and locked out/tagged out. Power for the decon shower, any temporary work lighting, HEPA-vacuums, and AFD for the decon will be supplied through a GFCI-board or pigtails. Power for abatement activities will be obtained from building sources.

Task 2: A double layer of floor poly and critical barriers with an attached decon and loadout with a negative pressure containment will be used, except that the walls in Room 19 that do not have asbestos joint compound are to remain in place and covered with a double layer of minimum 4-mil poly. The drywall/joint compound on the four inner walls in Room 8 and the north wall only of Room 19 will be removed in containment. All electrical circuits in these rooms will be shut off and locked out/tagged out. Power for the decon shower, temporary work lighting, HEPA-vacuums, the AFD and other electrically-powered equipment will be supplied through a GFCI-board or pigtails. Piping in these rooms not abated in Task 1 is to be abated in this task using gross removal procedures.

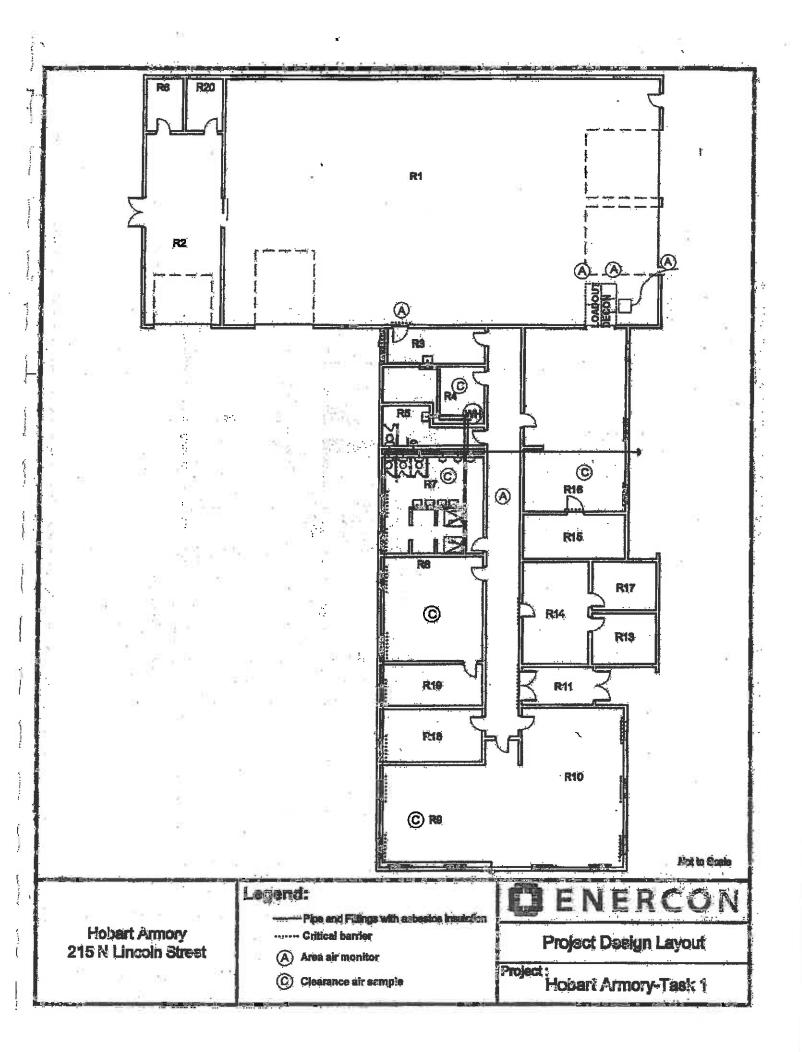
- K. DECONTAMINATION SYSTEM (10): An attached three-chambered decon will be used for both tasks. For Task 1, an AFD will be connected to provide air flow through the decon located at the single-door entrance to the office area from the drill room. The attached decon for Task 2 will be located in the corridor outside Room 8 and will share a dirty room with the loadout. When arriving at the decon, workers are to enter the dirty room, remove their suits, enter the shower with only their respirator on, remove their respirator and shower with soap and water. After rinsing their body and respirator, they are to proceed into the clean room to dry off, put on their street clothes, clean their respirator and store it for subsequent use. The clean room is to be kept tidy. Water for the decontamination shower will be obtained from nearby sources in the building. Filtered shower effluent will be discharged into the sanitary sewer system serving the building. Procedures set forth in OAC 380:50-15-7, 8 and 12 are to be followed.
- L. SOIL CONTAMINATION (11): No contaminated soils are to be abated in this project.

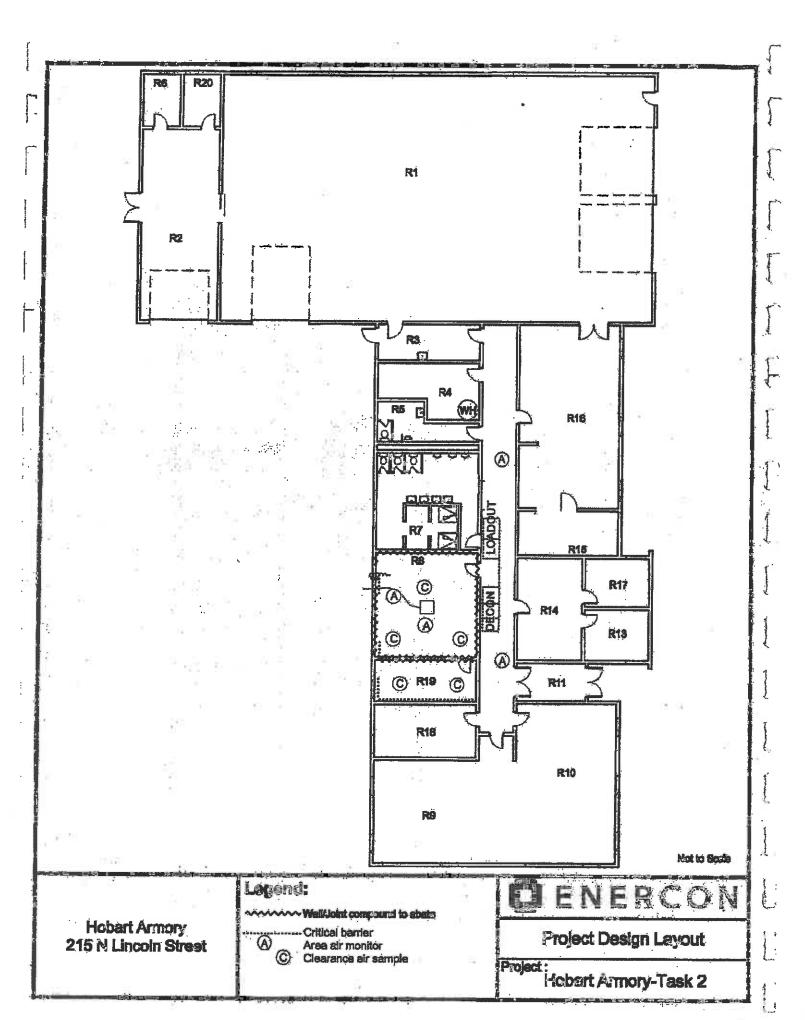
- DAMAGE PROTECTION (12): The contractor will endeavor to protect the building from damage M. other than that necessary for access to the asbestos during abatement activities. Demolition of sections of the restroom chase wall and other walls concealing piping will be required for access to piping inside. Removal of the ceiling tiles and grid in Rooms 8 and 19 will be required. Lighting and other ceilingmounted items will be secured to the roof trusses as the ceiling grid is removed. Where piping is located above ceiling tiles outside of the Task 2 work area, the contractor is to remove the ceiling tiles intact and work through the grid, protecting the grid from damage. He is to stack the tiles in the room from which they were removed for re-installation by others. The tiles from Room 8 and Room 19 may be stacked in the room across the corridor. They will be reinstalled by others.
- N. VARIANCES REQUESTED (13): None.
- INSPECTIONS: ODOL is expected to conduct routine prep, in-progress, visual and final inspections O. for this project.
- CERTIFICATION: This design was prepared by the undersigned for compliance with applicable federal and State regulations and approved variances. Market Commencer of the 
Bill Muenker

1.3

Date

Asbestos Project Designer, OKPD-140007







## 2033 Heritage Park Drive / Citiefroma City, OK 73129 / (405) 755-7272 / Fax (405) 755-2058

## Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 197791

Account Number: À845

Date Received:

07/20/2011

Received By:

CeCelia Van Eck

Date Analyzed: Analyzed By:

07/20/2011 Gayle Ooten

Methodology:

EPA/600/R-93/116

Client:

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Oklahoma City, OK 73116.

Project:

**Hobart Armory REVISED** 

Project Location:

217 N. Lincoln

Project Number:

N/A

QuanTEM Sample ID	Clicat Sample ID	Composition	Color/ Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
001	HA-1-01	Homogeneous	Brown Fiberboard	Asbestos Not Present	Cellulose	95 Binder
N 925		,		20		18
002	HA-1-02	Homogeneous	Brown Piberboard	Asbestos Not Present	Cellulosa	95 Binder
		v ii	Timer rically.	e bra ar		
<b>CO3</b>	HA-2-01	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	20 Gypsum
985 A	No. 1	W 24 W =	iii	0 100		5,
004	HA-2-02	Homogeneous	White	Asbestos Not Present	Cethilose	8 Gypsum
53	. <b>ü</b> -	16 16	Sheetrock	×		
		34	»;	ar k		30°
005	HA-3-01	Homogeneous	Gray	Asbestos Not Present	» NA	CaCO3
		7	Window Giazing	¥ •		Binder
006	HA-3-02	Homogeneous	Gray Window Glazing	Accessos Present Chrysotile <1	NA,	CaCG3 Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited TEM and PLM luboratory (Lab Code: 101959-0). This report release only to the specific items tested. NVLAP accreditation applies only to smally a performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/115 methods. This report may not be used to claim product andorsement by NVLAP or any other exercy of the US Government. This report may not be reproduced except in full, without the written approval of the liboratory.



2033 Heritagie Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fex (405) 755-2058

# Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 197791 Account Number: A845

Date Received: 07/20/2011

Received By: CeCelia Van Eck

Date Analyzed: 07/20/2011 \*

Analyzed By: Gayle Ooten

Methodology: EPA/600/R-93/116 Client

Enercon Services, Inc.

6525 N. Meridian, Suite 400

Okiahoma City, OK 73116

Hobart Armory REVISED

Project Location:

217 N. Lincoln

Project Number: N/A

QuanTEM Sample ID	Client Sample I	D Composită	m D	Color/ escription	Asbestos (%)		Non-Asbestos Fiber (%)	1	Non Fibro
007	HA-4-01		nus	White Ceiling	Asbestos Not Pres	ent disc	Cellulose	10	Gypsum Perlito Binder
	0.00	N 300		_000	: 1 ye		Royal		
<b>COS</b>	HA-4-02	2 Homogeneo	uś ,	White Ceiling	Asbestos Not Pres	ent	Cellulose.	1Ò	Gypsom Pertite
in c	11 (t)	A (leg. 13	100	* · · ·	111 23 23 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	· ;	55 10		Binder
009	E0-4-AH	Homogeneo	DS.	White	Aspestos Not Pres	eut	Celulose	12	Gypsum
4		93.9	2.78	Ceiling	25 U. F.;		<del>(</del>		Perlite
010	HA-5-01	Homogeneo		Gray ipe Fitting	Astiestos Presen Chrysotile Amosite	t 20. 20.	Glass Fiber	15	CaCO3 Binder
					S(#)5 #	163			
i to	,HA-5-02	Homogeneo	Pip	Cream, e Insulation	Asbestos Presen Amosite	t 15	NA		CaCO3 Binder
010	***		×				<u> </u>		;
013	HA-5-03	Hemogeneon		Gray	Asbestos Presen		Glass Fiber	10	CaCO3
	7 *		Pips	Insulation	Chrysotile Amosite	10 15	<b>e</b> .		Binder
					vanosira	13	*		

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Quantitive is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items trinted. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product cudoragment by NVLAP or may other agency of the US Covernment. This report may not be reproduced except in full, without the written approval of the laboratory.



2033 Heritaga Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

<u> 4</u>

## Polarized Light Microscopy Asbestos Analysis Report

197791 Client: Enercon Services, Inc. OuenTEM Lab No. 6525 N. Meridian, Suite 400 Account Number: A845: Oklahoma City, OK 73116 07/20/2011 Date Received: CeCelia Van Eck Received By: Date Analyzed: 07/20/2011 Project: Hobert Armory REVISED: 217 N. Lincoln Gayle Ooten Project Location: Analyzed By: Project Number: Methodology: EPA/600/R-93/116 N/A Non-Asbestos OuanTEM. Client Color/ Non Fibrous Description Fiber (%) Asbestos (%) Sample ID Sample ID Composition Brown/White Asbestos Not Present Cellulose Paint 013 • HA-6-01 Layered Binder Pipe Insulation Layered Black Asbestos Present Celhilose Tag 013a Chrysotile Binder Pipe Insulation Paint 014 Brown/White Asbestos Not Present Celhulose. HA-6-02-Lavered Binder Pipe Insulation Asbestos Present Celhilose Tar 014a Black Layered Chrysotile 15 Binder Pipe Insulation Layered 015 HA-6-03 Brown/White Asbestos Not Present Cellulose Paint Binder Pipe Insulation Black Asbestes Present Cellulose 10 Tar 015a Layered Chrysonile 15 Binder Pipe Insulation

Unless otherwise noted, upon receipt the condition of the sample was acceptable for enalysis.

QuantEM is a NVLAP accredited TEM and PLM inhoratory (Lab Code; 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to malysis performed utilizing EPA/600/M4-32-020 and EPA/600/R-93/1 if methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the liaboratory.



2033 Haritage Park Drive / Oldshoma City, CK 73120 / (405) 755-7272 / Fax (405) 755-2068

## Polarized Light Microscopy Asbestos Analysis Report

Enercon Services, Inc. QuanTEM Lab No. 197791 Client: 6525 N. Meridian, Suite 400 Account Number: A845 Oklahoma City, OK 73116 07/20/2011 Date Received: Received By: CoCelia Van Eck Hobert Armory REVISED 07/20/2011 Project: Date Analyzed: Project Location: 217 N. Lincola Analyzed By: Gayle Ooten Project Number. N/A EPA/600/R-93/116 Methodology: Color / Non-Asbestos Non Fibrous **QuanTEM** Client " Description Asbestos (%) Fiber (%) Sample ID Sample ID Composition HA-7-01 White Ashestos Present Callulose 016 Layered Chrysotile Glass Fiber 20 Binder Pipe Wrap Amosite i0 Asbestos Not Present Cellulose 95 Binder 0164 Layered Brown Pipe Insulation Asbestos Present Cellulose Tar Black 016b Lavered Chrysotile 15 Binder Pipe Insulation White ' Asbestos Present NA CaCO3 017 HA-7-02 Homogeneous Chrysotile Binder Pipe Insulation Amosite 10 Asbestos Present NA: **CaCO3** White HA-7-03 018 Homogeneous Chrysotile Binder 10 Pipe Insulation Amosité. 10 Asbestos Not Present NA Glue 019 HA-8-01 Homogeneous Tan , Binder Carpet Mastic

Links otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP secredited TEM and FLM inhoratory (Left Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/A4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or my other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



# 2033 Heritage Park Drive / Oldahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

# Polarized Light Microscopy Asbestos Analysis Report

QuanTEM La Account Num Date Received By: Date Analyzed Analyzed By: Mathodology:	ber: A845 i: 07/20/2 CeCelia i: 07/20/2 Gayle C	011- Van Eck 011	7.	Client: Project: Project Location:	Enercon Services, Inc. 6525 N. Meridian, Suits 40 Oktahoma City, OK 73116 Hobart Armory REVISED 217 N. Lincoln	Ó
QuanTEM Sample ID	Client Sample ID	Composition	Color/	Project Number: Asbestos (%)	N/A Non-Ashestos Fiber (%)	Non Fibror
020	HA-8-02	Homogeneous	Tan; Carpet Mastic	Asbestos Not Presen	o 2 2 2 1	Gine Binder
021	HA-9-01	Homogeneous	White: Wall Texture	Asbestos Not Presen	8	CaCO3 Paint
022	HA-9-02	Homogeneous	White Wall Texture	Asbestos Not Presen	i na	CaCO3 Paint
023 .:	HA-9-03	Homogeneous	White Wall Texture	Asbestos Not Present	NA.	CaCO3 Paint
<b>024</b>	HA-10-01	Homogeneous	Tan  Joint Composind	Asbestos Present Chrysofile	NA NA	CaCO3 Binder
025	HA-10-02	Homogeneous	Tim	Asbestos Present Chrysotile	NA .	CaCO3 Binder

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited TEM and PLM interactive (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/1 is methods. This report may not be used to claim product endorscenent by NVLAP or any other agency of the US Government. This report may not be reproduced except in fall, without the written approval of the laboratory.



2033 Heritage Park Drive / Oktahoma City, OK 73120 / (405) 755-7272 / Fex (405) 755-2058

# Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 197791 Client: Enercon Services, Inc. Account Number: A845 6525 N. Meridian, Suite 400 Oklahoma City, OK 73116 Date Received: 07/20/2011 Received By: CeCelia Van Eck Date Analyzed: 07/20/2011 Project: Hobart Armory REVISED Analyzed By: Gayle Ooten Project Location: - 217 N. Lincoln Methodology: EPA/600/R-93/116 Project Number: N/A Quan TEM Client Color / Non-Asbestos Non Fibrous Sample ID Sample ID Composition Description Asbestos (%) Fiber (%) 026 HA-10-03 Homogeneous Tan Asbestos Present NA CaCO3 Joint Compound Chrysotile Binder 027 HA-11-01 Layered White Asbestos Not Present Vinyl NA. Floor Tile CECQ3 027a Layered Bleck Asbestos Present Cellulosa <1 Tar Mastic Chrysotile 02k HA-11-02 White Lavered Asbestos Not Present NA Vinyl Floor Tile CaCO3 0288 Layered Black sbestos Present Tar-Mastic Chrysotile

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Gayle Ooten, Analyst

QuanTEM is a NVLAP accredited TEM and PLM inhoratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to sanitysis performed utilizing EPA/600/M4-52-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endotsagent by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

7/21/2011

Date of Report

# ASBESTOS CHAIN OF CUSTOLLY

N - 5

10000

LabiNo

2035 Heritage Park Drive, Oktarional Chy, OK 73120:7502 (809) 922-1650 • (409) 755-7272 : Rec (405) 755-2059 PERALL DOCUMENT - PUBLISH PRINT LEGISLY

							V	Carlo Carlo
	1997年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の						the state of	And Creek Line
Transfer Co. Co.		12.7. A.	g warne	Projections Hours	The Marie of			QuanTEM Website
Bell		A Laboratory		Popertudent 2/7			10.0	
		Calenda	dan i	Michiga				
	A SAMPA			10-21				
					344.44		THE CHANGE	TO SERVICE STREET
		1111						
			1 to 1 to 1				*	
				11.6				
			177					
Bulk Analysis (EPA 600/R-93/116)		Insulation	Alt- Livering		Endit-Presence / Atheres (SM600/H-02/11)	SEEMSOON 42/114		
400 Fothe Count			AC-NOSH 7402		Unit. Quartitutive Tresportes. Clustesc	physis Charles		Carrier Dian
1000 Polini Cisore			AP-60 (0812		Disk madrice / Abdress	***	10	2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Gravinetiik Preparation			Driving Water Gra too.2	Erk too.z		Part Clarifornia (Three Parts A CTM Deres		
Patitien	A SEE THE		Direction all scale metal	290/18/008	3			S-Dav
107~ //	M God //Sank		155c/ (2)				A STANLEY OF THE STAN	3.62 1 VOLVOLO (1.53)
1 -/-02		:						
2-01		Orten	*					
20-2-								
		KRCK	S. Property					
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	the second of the second	The second second			

PRINCE ALTERNATE IN MARKETONE DESCRIPTION PRINCE

by Linkery only: Azzo R. Sonta To Bot, Otto

SATURDAY SAMPLE DELIVERY. CALL TO SCHEDULE . Use this address for the



# ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (403) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Page 2 of 2

Lab No. 193391

2	yelvenniolini apaliona			
Comp	Company: Control			Proper Name Apple 6 Acres 1
	O signey		( En los	
700 1000 1000 1000 1000 1000 1000 1000				
=	HA-5-02	X	C.K.	
12	-5-63	8	Grav	
13	10-5-		Son A	Pite Tasale have beauth Cil
14	-6-62			
15	-6-03		Ž	
16	-7-6/		(30c. /64.16	Pro Leed La 3"-4" Date 14
17	-7-02		-	
18	-7-03	П	-3	
19	- F-61		Thomas / Coffee	Fire Crost Mas In
70	-3-02		-	
17	10.6-		(L): A	Colling
22	-9-01		_	
23	-9-03		>	
77	10-01-	6	U. 2 /W/L	John Comment
23	30-01-	6		
76	-10-03		7	<b>A</b>
72			Sym	The Tilk wil Rhache (1x1)
82	-4-02	þ	4	
2				
30	**			

SATURDAY SAMPLE DELIVERY - CALLTO SCHEDULE . Use this address for Saturday Dalivery only: 4220 M. Santa Te Arch Oldshama Chy. OK 73198-8317 . Mark Package 7405d for Saturday Phitug\*

S. Lorentzak

1

-

PRIMARY EXIT THROUGH DEBON THEN TO NEAREST DUTSIDE EXIT, EXITS WILL BE ILLUMINATED, 1-10LB ABC FIRE EXTINGUISHER INSIDE WORKAREAAND 1 AT DECO) 288, ORMINION OF 2 PERSONAL SAMPLES, 1 RISIDE AREA INSIDE EACH TASK. AREA, 1 OUTSIDE DECON CLEAN ROOM FOR EACH TASK, 1 ALONS LOAD-OUT PATH CURING LOAD-OUT AND 1 AT EACHARD EXAMISTED TO THE CUTSIDE. ATTACHED & CHAMBER DECON WALL BELUSED FOR EACH TASK. PROCEDURES SET FORTH IN CAC SMISSALET, S. AND 12 ARE TO BE FOLLOWED. 270'LF OF TRITHAT CONTAINS 2,20% CHRYSOTILE AND 15-20% AMORITE LOCATED THROUGHOUT BUILDING AND 800 SF OF DRYWALL WITH JOINT COMPOUND THAT CONTAINS 3,4% CHRYSOTILE IN ROCIAS AND 18 FOLLOW SECTION J. CONTAINMENT INSTROOS LOCATED IN THE PROJECT DESIGN AFD NOT REQUIRED IN TASK (1 BKDEPT ON DECON, AFD WILL BE EXHAURTED TO THE OUTBIDE AND MONITORED. 1 AFD IN TASK 2 THAT WILL BE EXTERNALLY EXHAUSTED AND MONITORED. FIVE(6) 1200 LITER PON CLEARANCES WILL BE COLLECTED FOR EACH TASK FOLLOWING THE VISUAL. POLICIW SECTION O. ASBESTOS ABATEMENT METHODS AND SECTION J. CONTAINMENT METHODS LOCATED IN THE PROJECT DESIGN Project Designer Bill MUENKER OKPD-140007 CAC 38R489 CRIAHOMA NULES FOR ABATEMENT OF FRIABLE ASSESTOS Date: 427574 Project Name: HORART ARMORY ONECT) PHASE WITH TWORD BEOLENITAL TASKS COMMENTS Project Nor 11-6988 3017 N. Stiles, Oktahoma City, OK 73195 Fax - 406.621-8025 Okletome Department of Labor RELECTED : -Ashestos Division Phone - 406.621.5464 ACCEPTED χį × ÞÇ × × × 24 × × . X identification of argue of egraph and a the protection plangist a degram for energency equipt routes, and the extinguisting piacemains. Numbers and locations of Clean Test somples and type of entlyde to be employed. The questify, type, percentage with built analysis unistative presumed and a dispensed location of subsetting materials to be absolute. The extent th which materials contributed solls, if any, frust the extended, and the stangeling methods of delamining the efficiency of such spinoral. Defails of project commitment(s), give tage or situh-confidurents, including drawings. Defails shall (technic all supplicible subchapters, breiteling but not limited to scalifolding and if a selection. Abstonent methods, and behnisues, end numbers of containments, glove begs or mini-confiburates. Numbers, es positios, o diagram to identify locaticas, and discharge paints, if any, of negative et machines. A statement that DOL Abstrant of Poble Entering Rules apply. Details of parsonal and area filt moritoring sampled. Defeils of decordamination systemist. 1 Sequencing and phasting of work Project Design Review Form CALITA BPROVED: Approved: eid Eine o, ģ ÷ ri ÷ wf. K \*\* ÷ નં **125**4 MHET:

÷

ĥ Ą

ţ

The Department of about pressure to negate authorial arguments or environmental controls consistent with the Abstendent of Elabie Abbeston Metallic Builds which may be necessary because of discrepandes this project design and additional controls in the control of the control M. M. C. C. REVIEWED BY: DATE [2][5][1] REVIEWED BY:

×

FOLLOW SECTION M. DAMAGE PROTECTION LOCATED IN THE PROJECT DESIGN

Ž

×

Specki materijk or methody required to product bijens in the work, erre should be detailed, (plywood over expektig or herbiood incom to prevent demage from ecutodés dedor taling mylégitals.

싢

-110%

#

141

Any variances from the Absternant of Prints Astronics Their Pales.

NO VARIANCES REQUESTED AT THE TIME PROJECT DESIGN WAS SUBMITTED

## SPECIFICATION FOR

## REMOVAL OF NON-FRIABLE ASBESTOS

#### **HOBART ARMORY**

Table of Contents		Approvals
PART 1-GENERAL		
1.1 SCOPE OF WORK	Philippe	
1.2 SEQUENCE OF WORK		
1.3 REGULATORY COMPLIANCE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Project Designer
1.4 NOTIFICATIONS		
1.5 SUBMITTALS		Y
1.6 DEFINITIONS		* =
PART 2-PRODUCTS	,	mmett W. Muenker
PART 3-EXECUTION	***************************************	OK-PD140007
3.1 WORKER PROTECTION	***************************************	352
3.2 EQUIPMENT REMOVAL PROCEDURES,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10 8 11 1
3.3 DECONTAMINATION ENCLOSURE SYSTEM		
3,4 CONTAINMENT FACILTIES		4 12
3.5 PREPARATION OF ASBESTOS ABATEMEN		3
3.6 ASBESTOS FLOOR TILES AND ADHESIVE R		18 6 19
3.7 ASBESTOS-CEMENT (TRANSITE) MATERIA		1, 2# (
3.8 ASBESTOS-CONTAINING CAULK AND WIN		N 5 485
3.9 PERSONAL PROTECTIVE EQUIPMENT/AIR		
3.10 CLEAN-UP	, 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	35, 75
3.11 CLEARANCE TESTING		3 N H
3.12 DISPOSAL OF NON-FRIABLE ASBESTOS V		18 o 8
FIGURE(S): NON-FRIABLE MATERIAL LOCATION	ONS "	

## **PART 1-GENERAL**

## 1.1 SCOPE OF WORK

The work identified herein includes the removal and disposal of non-friable, asbestos-containing materials (ACM) by means that do not render them friable. The work noted in this Section is the special controls required by regulatory agencies having jurisdiction over such work. Most of the controls pertain to Contractor employees and site visitors' personal health and safety from exposure to asbestos fibers. The requirements will be monitored throughout each job by the asbestos project designer or his representative functioning as the Owner's Technical Representative.

A. Approximately 5,400 square feet of Transite roof panels located above the drill room at the Hobert Armory are to be removed and disposed. Procedures for Transite removal are stated in Paragraph 3.7. The location the roof is shown on Figure 2.

- B. Approximately 430 square feet of floor tile adhesive located beneath non-asbestos floor tiles are to be removed and disposed. Procedures for removal are stated in Paragraph 3.6, Floor Tiles and Adhesive Removal.
- C. Paragraph 3.8 does not apply to this location.

## 1.2 SEQUENCE OF WORK

A. The work shall be conducted in a single phase. The work should be done prior to or following completion abatement of friable asbestos materials in the building. This work is not subject to inspections by the Oklahoma Department of Labor.

## 1.3 REGULATORY COMPLIANCE

- A. U.S. Department of Labor, OSHA Asbestos Regulations, Code of Federal Regulations Title 29, Part 1926, Section 1101. (29 CFR 1926.1101)
- B. U.S. EPA regulations for Asbestos-containing Materials in Schools, Code of Federal Regulations Title 40 Part 763. (40 CFR 763)
- C. The Contractor will keep copies of the above regulations available for reference at the work site.
- D. Other state and local ordinances, regulations, or rules pertaining to asbestos including its storage, transportation, and disposal.
- E. Where any conflicts exist between these specifications and regulations published by federal or state agencies which govern abatement, transportation and disposal of non-friable asbestos-containing materials, the more restrictive shall govern.

#### 1.4 NOTIFICATIONS

No regulatory notifications required. The Contractor is to coordinate the work with the Owner's Asbestos Consultant. The Contractor shall notify The Owner's Asbestos Consultant a minimum of five working days in advance of mobilization on site.

## 1.5 SUBMITTALS

- A. Pre-work submittals: At least five (5) days prior to beginning asbestos abatement work, the contractor shall submit copies of the following information to the Owner's Technical Representative.
  - 1. The name of the asbestos supervisor to be used on the project.
  - 2. A statement signed by an officer of the Contractor's firm, that all workers employed for the abatement of non-friable asbestos materials:

- a. Have completed AHERA worker or supervisor training or 8-OSHA training on removal of resilient floor coverings and adhesives.
- b. Have had a medical examination within the previous year and are medically qualified to wear a respirator.
- c. Have been fitted for the model and size respirator they will use on the job within the previous year.
- 3. A project schedule indicating planned work hours, work days and project start and completion dates.
- 4. Documentation of an initial or negative exposure assessment indicating the breathing area fiber concentrations expected during removal of the materials and the PPE required during the work. Personal air monitoring will be required for two full work shifts if such assessment is not provided.

## C. During-work submittals:

- 1. If an exposure assessment is not provided, the Contractor shall conduct an initial exposure assessment and provide personal air monitoring results identifying worker name, work activity, PPE use, and TWA exposure level, in accordance with OSHA regulation 29 CRF 1926.1101.
- 2. Copies of any inspection reports, consultation reports or other written project correspondence with any regulatory agency or The Owner's Asbestos Consultant.
- C. Post-work submittals: Within 15 days of completion of asbestos abatement, the contractor shall submit copies of the following documents to The Owner's Asbestos Consultant.
  - 1. Copies of the waste disposal manifests confirming disposal at an authorized waste disposal facility.
  - 2. Any outstanding during-work submittals.
- D. Final payment to the contractor will not be authorized until all work is satisfactorily completed and the submittals have been provided to The Owner's Asbestos Consultant.

## 1.6 DEFINITIONS

The following definitions are adopted by reference. If statutory definitions are duplicated, the more stringent definition will apply.

- A. 29 CFR 1926.1101 (b)
- B. 40 CFR 61.141

#### PART 2-PRODUCTS

Not used.

#### **PART 3-EXECUTION**

#### 3.1 WORKER PROTECTION

- A. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and suitable for the asbestos exposure level in the work area, according to OSHA Standard 29 CFR 1926.1101. Where respirators with disposable filters are employed, provide sufficient filters for replacement as required by the worker or applicable regulation. Full beards, "mutton chop" sideburns, or any other facial hair that interferes with proper fit or use of respirators will not be allowed. Removal of non-friable asbestos shall begin with air-purifying respirators and their use will be continued until a statistically-significant negative exposure assessment is produced.
- B. Provide workers exposed to airborne concentrations of asbestos which exceed the levels prescribed in OSHA standard CFR 1926.1101 with sufficient sets of protective full-body clothing. Such clothing shall consist of full-body coveralls and headgear.
- C. Pursuant to OSHA requirements, the Contractor will provide an annual medical examination for each worker assigned to a project under this contract.

1. The medical examinations will include, at a minimum, a posterior and anterior chest x-ray, pulmonary function tests (FVC and FEV), and a general health history.

2. No medical additional examination is required of any employee, if adequate records show that an employee has been examined in accordance with this paragraph within the past one year period.

3. Any employee found to have been exposed without proper protection at any time to airborne concentrations of asbestos fibers in excess of the limits prescribed in OSHA Standard 29 CFR 1926.1101 shall be notified in writing of the exposure as soon as practical but not later that five days of the finding. The employee shall also be timely notified of the corrective action being taken.

4. The Contractor shall maintain records of these examinations for each worker, and upon request, provide them for review by the employee, Owner, Owner's Representative, OSHA officials, and State Inspectors as appropriate.

## 3.2 EQUIPMENT REMOVAL PROCEDURES

A. Clean external surfaces of contaminated containers and equipment thoroughly by wet wiping before moving such items to uncontaminated areas.

## 3.3 DECONTAMINATION ENCLOSURE SYSTEMS:

A. Not Required

#### **3.4 CONTAINMENT FACILTIES**

A. Unless otherwise specified, ventilated isolation barriers and decontamination facilities will not be required for all separate work areas where only non-friable asbestoscontaining materials are removed or encapsulated, as long as these materials are

removed essentially-intact using wet procedures. Where portions of the building are occupied during the work, critical barriers shall be installed between the work areas and the occupied portions of the building.

- B. The Contractor will post warning signs or install asbestos barrier tape around the perimeter of the entire work area, specifically at any entrance to the work area, and at any other location specified by The Owner's Asbestos Consultant. The signs shall meet the specifications outlined in OSHA Standard 29 CFR 1926.200 and 29 CFR 1926.1101(k)(7).
- C. The Contractor will restrict access to the work area to authorized individuals only. The work area will be secured at all times when contractor personnel are not present to control entry.

#### 3.5 PREPARATION OF ASBESTOS ABATEMENT WORK AREA

- A. Remove movable objects from work areas to a temporary location within the building. Where carpeting is installed over floor coverings, the carpeting may be removed prior to or concurrently with the removal of the floor tiles.
- B. For removal of adhesive, protect walls and fixed objects within the work area and enclose with minimum 4-mil plastic sheeting sealed with tape, or protect with 36-inch high splash guards.
- C. Maintain emergency and fire exits from the work areas, or establish alternative exits in compliance with applicable fire codes.

#### 3.6 ASBESTOS FLOOR TILES AND ADHESIVE REMOVAL

- A. Floor tiles shall be removed using the following procedures:
  - The entire floor surface shall be wetted with surfactant-amended water. Floor tiles may not be removed dry.
  - 2. The tiles shall be removed by manual methods using a scraper or spade. Power chippers or grinders are not permitted.
  - 3. The tile shall be placed in minimum of 6-mil unlabeled plastic bags, preferably black opaque. They shall not be placed in asbestos disposal bags. The bags shall not be overfilled which promotes the tile tearing through the plastic.
  - 4. The bagged tiles shall be disposed in a sanitary landfill or construction debris landfill that accepts non-friable asbestos waste. Landfill disposal receipts are required in paragraph 1.5 C1 of this section.
- B. Floor tile adhesive shall be removed by the following procedures:
  - 1. A low-odor, non-flammable, non-toxic mastic/adhesive remover shall be mopped onto the floor. Using a broom, squeegee or scrub brush, the solvent shall be agitated

into the mastic/adhesive. The material may be worked onto additional areas until it reaches a tarry consistency at which point it shall be scraped up and bagged.

2. Repeat as necessary until the mastic/adhesive is removed.

3. A final cleaning with wiping rags shall be conducted. Used rags shall be placed in 6-mil unmarked plastic bags and disposed as non-friable asbestos waste.

4. No sanding, grinding or abrading of floors where asbestos-containing mastic/adhesive remains shall be permitted.

## 3.7 ASBESTOS-CEMENT (TRANSITE) MATERIAL REMOVAL

Transite materials shall be removed using the following procedures:

A. Asbestos barrier tape is to be installed around the area of work to demarcate the

regulated area.

B. The Contractor shall place a drop cloth on the ground along the exterior the building and on the floor inside the drill room in the area where the roofing panels are to be removed to catch any breakage that may occur during removal of the panels. The drop cloths are to be moved as necessary to cover the surfaces beneath the active removal area during removal of the panels.

The Contractor shall use boom lifts or other similar equipment to access the roof panels for removal. The material is to be wetted prior to removal, removed from the structural members intact, lowered to the ground and placed in a poly-lined dumpster for transport

to the disposal landfill.

D. Care is to be taken during removal to prevent breakage of the panels during removal and handling, as the panels are to be removed intact to maintain their classification as non-friable material.

E. The Contractor shall ensure that the area is left clean and tidy following removal of the

roof.

F. Clearance air sampling is not required for wet removal of Transite outdoors.

# 3.8 ASBESTOS-CONTAINING CAULE AND WINDOW GLAZING

A. Caulk and window glazing shall be removed using the following procedures:

1. A poly drop cloth shall be placed beneath the area where the cault/glazing is to be removed.

2. Loose caulk/glazing shall be removed using a HEPA-filtered vacuum.

3. The caulk/glazing that is not loose shall be wetted and removed using manual means. The material is to be kept wet while scraping or brushing. The area of removal is to

be damp wiped following removal.

- 4. The removed material shall be placed in a 6-mil minimum unlabeled opaque plastic contractor trash bags and sealed with duct tape for disposal. The bagged material shall be disposed in a sanitary landfill or construction debris landfill that accepts non-friable asbestos waste. Landfill disposal receipts are required in paragraph 1.5 C1 of this section.
- 5. The Owner's Asbestos Consultant shall inspect the areas of removal following completion of the work.

- 6. The work area is to be left clean and tidy following removal of the caulk/glazing.
- 7. Clearance sampling is not required for removal of three linear feet or less of this material indoors or any amount outdoors.

## 3.9 PERSONAL PROTECTIVE EQUIPMENT/AIR MONITORING

- A. Air sampling for OSHA compliance is the Contractor's responsibility by statute. This section deals only with the air monitoring requirements of the Contractor in performing employee exposure assessments. Industrial hygiene samples for quality assurance and clearance tests are not required to be done by the contractor, but will be conducted by the Owner's Asbestos Consultant as deemed appropriate.
- B. Samples of airborne asbestos concentrations shall be collected with air sampling pumps on 25-mm cellulose ester membrane filters of 0.8 micrometer porosity mounted in an open-face filter holder. Pumps shall be calibrated before each sampling period and a record of this calibration entered in the air sampling log.
- C. Unless a negative exposure assessment (NEA) has been performed and is available on site, work shall commence in full-body suits and half-face air purifying respirators, and continuous breathing zone air monitoring shall be conducted from start to completion of the non-friable material removal, disturbance, or repair operation. Twenty-five percent (25%) of the workers, with a minimum of 2 workers, shall be monitored each work shift. Any sampling device shall not exceed eight (8) hours (real time) of operation with any one filter. At times, a lesser real time may be required for a particular cassette, Sampling may be discontinued at such time as an NEA is completed for the work task and work may proceed without full-body suits and respirators. A minimum of two full work shifts is considered sufficient for an exposure assessment.
- D. Sampling devices shall be located within the breathing zone of personnel, including those removing, bagging, and loading-out bagged waste.
- E. All laboratory determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method using phase contrast illumination and 400-450x magnification, according to NIOSH 7400. Analysts shall be successful participants in the AIHA Proficiency Analytical Testing program or be individually registered and proficient participants through the AIHA Asbestos Analyst Registry.
- F. If any air sample collected in the breathing zone exceeds 0.1 fibers/cc, the Contractor will immediately discontinue all work until the cause is identified and corrected. Work will resume in air purifying respirators and full-body protective coveralls.

#### 3.10 CLEAN-UP

- A. After completing the asbestos work the areas shall be cleaned up as follows:
- B. Remove waste containers, and equipment from the work area.

- C. When a visual inspection by the Owner's Asbestos Consultant determines that the areas are free of visible accumulations of asbestos material and debris, the contractor shall remove the splash guards and his equipment, signs, barrier tape, etc., from the area and PCM clearance sampling will be conducted by the Owner's Asbestos Consultant.
- D. Following receipt of satisfactory clearance sample results, the work area released for unrestricted worker access.

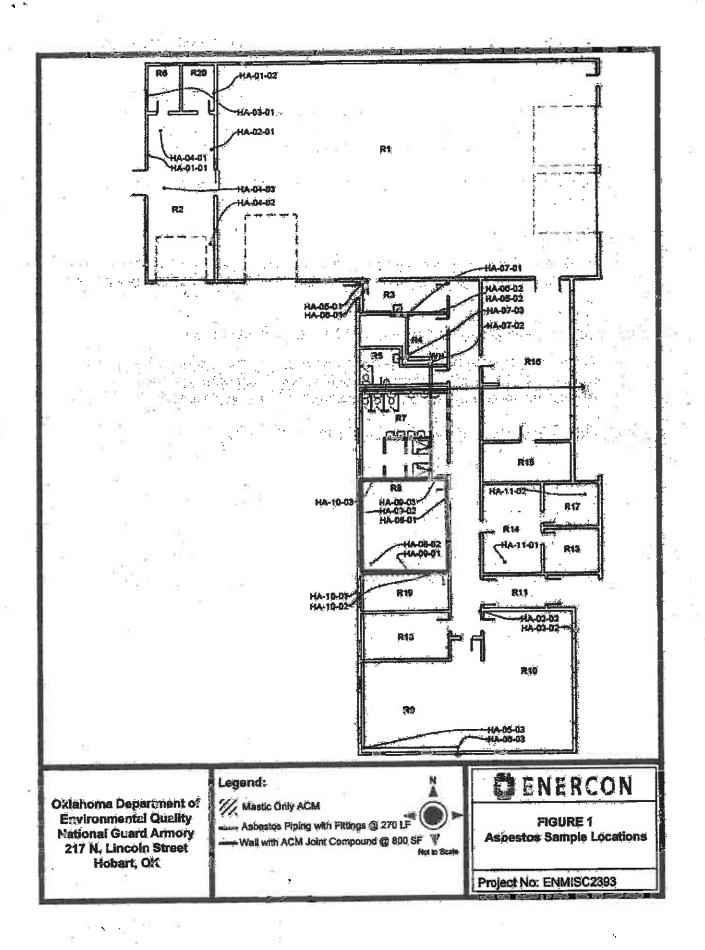
#### 3.11 CLEARANCE TESTING

A. The Owner's Asbestos Consultant will collect and analyze five 1,200 liter PCM air samples where non-friable asbestos has been removed unless otherwise stated in Paragraphs 3.7 -3.8.

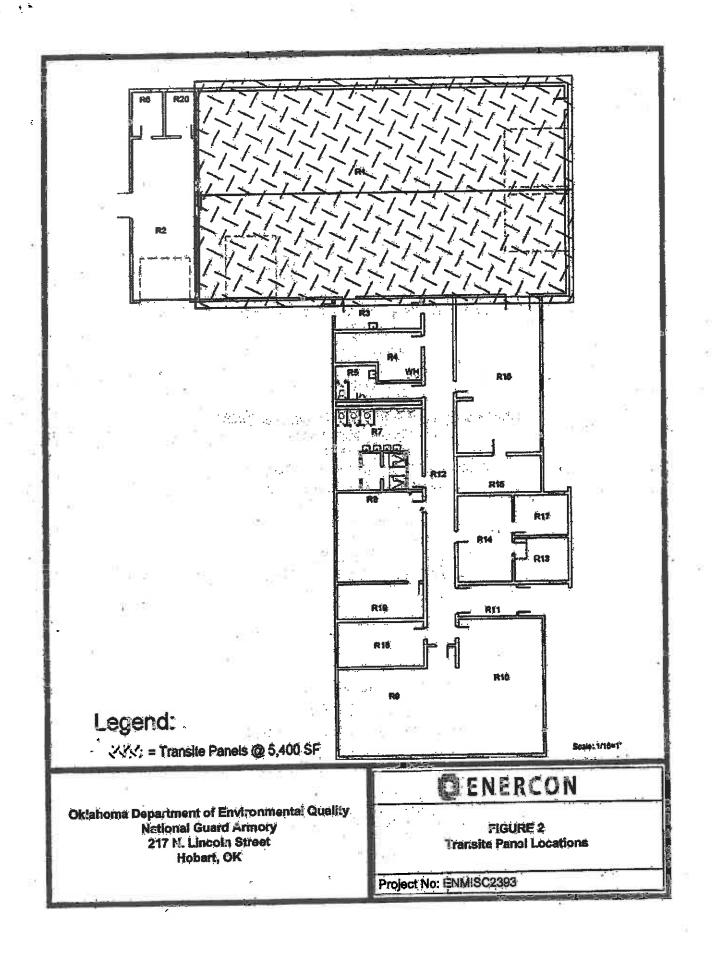
# 3.12 DISPOSAL OF NON-FRIABLE ASBESTOS WASTE/CONTAMINATED MATERIALS

A. As the work progresses, and to prevent exceeding available storage capacity on site, remove sealed bags of waste/contaminated materials and dispose of such bags at a disposal site meeting EPA and state requirements for non-regulated ACM.

FIGURE(S) - NON-FRIABLE MATERIAL LOCATIONS - SEE FOLLOWING PAGE(S)



ĸ



# ATTACHMENT 3

Health & Safety Aspects to Consider

#### Personal Protective Equipment

29 CFR 1910.1025(f)(2), for housekeeping and rehabilitation the employer shall select respirators from among those approved for protection against dust, fume, and mist by the National Institute for Occupational Safety and Health (NIOSH), under the provision of 42 CFR part 84. The employer shall institute a respiratory protection program in accordance with 29 CFR 1910.134(b), (d), (e), and (f). As a minimum, personnel conducting the decontamination of the range shall be provided with the following personal protective equipment.

- a. Under 29 CFR 1910.1025 (g). For employees engaged in range rehabilitation and/or range conversion, the employer shall provide at no cost to the employee, and ensure that the employee uses appropriate protective work clothing and equipment such as, but not limited to:
  - (1) Protective coveralls with hood and shoe covers or disposable Tyvek TM full body suit.
  - (2) Disposable rubber gloves; and disposable shoe coverlets (If necessary).
  - (3) Full-face air purifying respirator with P-100 cartridges.
    - b. The employer shall provide the clothing required in a clean and dry condition at least daily to employees engaged in the conversion of IFRs.
    - c. The employer shall provide for the cleaning, laundering, or disposal of used or contaminated protective clothing and equipment.
    - d. The employer shall assure that all protective clothing is removed at the completion of a work shift only in areas designated for that purpose (Change Areas or Change Rooms).
    - e. The employer shall ensure that contaminated protective clothing that is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area that seals sufficiently enough to prevent dispersion of lead dust.
    - f. The employer shall further inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.
    - g. The employer shall ensure that the containers of contaminated protective clothing and equipment are labeled as follows: <u>CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.</u>

#### REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

ASTM E1792-03

Standard Specification for Wipe Sampling Materials for Lead in Surface Dust

AR 11-34

The Respiratory Protection Program

AR 40-5

Preventive Medicine

DODI 6055.5

Industrial Hygiene and Occupational Health

DOD 6055.5-M

Occupational Medical Surveillance Manual

29 CFR, Part 1910

Occupational Safety and Health Administration, Department of Labor

National Institute for Occupational Safety and Health (NIOSH) 76-130 Lead Exposure and Design Considerations for Indoor Firing Ranges, Department of Health, Education and Welfare

NGR 385-15

Policy and Responsibilities for Inspection, Evaluation and Operation Army National Guard National Guard Indoor Firing Ranges (IFRs).

NGR 415-5

Army National Guard Military Construction Program Development and Execution

NGR 420-10

Construction and Facilities Management Office Operations

Technical Manual, 5th Edition

Occupational Safety and Health Administration, Department of Labor Section III

# Lead-Based Paint Encapsulants approved by DEQ

Encapsulant Manufacturer	Encapsulant Product(s)
Coronado Paint Company	LEAD BLOCK™
Dumond Chemicais	LEAD STOP <sup>TM</sup>
Dynacraft Industries, Inc.	Back to Nature Protect-A-Coat
Encap Systems Corporation	EncapSeal <sup>TM</sup> I
Encap Systems Corporation	EncapSeal <sup>TM</sup> II
Fiberlock Technologies, Inc.	Child GUARD Interior/exterior
Fiberlock Technologies, Inc.	L-B-C® Type III
Global Encasement, Inc.	.leadLock <sup>™</sup>
Grace Construction Products	Lead Seal®
Grace Construction Products	Barrier Coat® II
Insl-x Products Corporation	INSL-CAP <sup>TM</sup>
SAFE Encasement Systems	SE-120 Protective Skin
Specification Chemicals, Inc.	NU-WAL® #2500 Coating

# Hobart Armory Window Measurements And Scope of Work

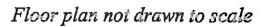
- Window measurements are listed as approximate Width X Height; Contractor to field verify.
- All window bars shall be removed and properly disposed.
- All removed windows shall be properly disposed.
- Windows installed must meet all attached specifications.
- Window installation and oversight of window removal shall be performed by a third party professional window installation company.
  - o Window installer shall have no less than five (5) years installation experience.
  - Window installer shall have experience with removal of steel casement windows
- All interior and exterior window sills shall be HEPA vacuumed and wet washed after windows have been removed and replaced.
- Windows will be replaced with General Aluminum Series # 2700 / 2800 Picture
   Windows (Specifications Attached) or equivalent.
  - o All windows will be replaced with opening windows
  - o All windows shall have Low E glazing
  - o All windows shall have Bronze Finish on frame with powder baked on enamel
- Submit Product Data and Shop Drawings.
- Product Substitution: Substitutions include products differing from those required by this specification.
  - 1. Submit two (2) copies of each request for product substitution. Identify product to be replaced and provide complete documentation showing compliance of proposed substitution with applicable requirements. Include a full comparison with the specified product, and a list of changes to other Work required to accommodate the substitution.
  - 2. Submit requests for product substitution in accordance with the time allotted to do so by the Scope of Work included within the Bid Solicitation.
  - 3. State of Oklahoma, Department of Environmental Quality will review the proposed substitution and notify bidder of its acceptance or rejection within the time allotted to do so by the Scope of Work included within the Bid Solicitation.

Below are the window locations, amount of windows, and approximate measurements.

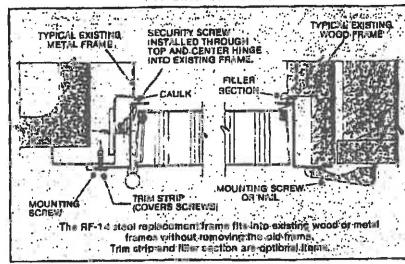
o All 15 windows located in Rooms 1, 2, 6, and 20 shall be removed and replaced. Windows measurements are approximately 42" X 36"

# ATTACHMENT 6

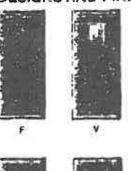
Door Scope of Work Including Measurements and Specifications Hobart Armory - 1949 Floor Plan



#### TYPCIAL SECTION



#### DESIGNS AND FINISHES AVA





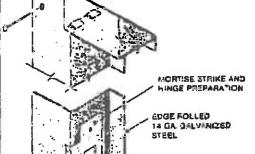




LOUVERS



Knocked Down Corner Construction. Fast and Bady tab and Slot Agrembly Design Insures Clean and Neat Joint.



ADMESIVE BACKED RUBBER S LEMCERS

OUTSWING

SILL

INSWING SILL

SILL WHEN REQUIRED, ATTACHED WITH SHEET METAL SCREWS

0

FRAME 'S FUR'SHED WITHOUT SILL AS STANDARD.
AN OPTIONAL INSWING OR OUTSWING SILL IS AVAILABLE.
WEATHERSTRIPPING ALSO IS AVAILABLE AS AN OPTION



LY DESIGN INSURES

Commercial Replacement Unit shell be supplied as a completourit, consisting of 18 ga. door (RL-18) and 14 gc. frame
(RF-16);

"Single openings shall be pre-hung, ready for quick and easy
installation. Double openings shall be supplied as suppriste."

units (frame-and two door laaves) not pre-hung.
Doors shall conform to the (blicwing)

SPECIFICATIONS.

Doors shall be as menulactured by Steeters., Cincinnell, Ohio, and designated as RL-11 (1)/\* 18 gs. steet).

Doors, shall be tabricated from cold rolled stable

Doors shall now 5" beveiltin.2" on hingo and lock sides.

Dographali have vertical machanical interjucting actions criticipe and lock edges with vertical edge seems.

Doors shar be provided with up and bottom up and swell channels, spotwelded within the door.

Doors shall be reinforced, attliened and sound deadwhad with impregnated traithonaycomb core completely filling the inside of the door and assentate to the inside section of the considerations.

Doors chall be morated and adequately relations distributed of ellipsides.

Doors shall be phosphatiged and receive one coal of baked-on time point.

Frames shell conform to the following:

Frames until the as manufactured by Steelcret. Cincinnat, Onio and designator as RF-14 (14 gt.).

Frames shall be accurately formed from galvenized steel.
Frames shall be lumished fracked down (KO). Corners shall have table for secure and pasy interlocking of jamps to feed at each Corners.

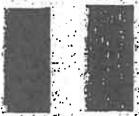
Frames shall be supplied with achesive backed risher sumpers; three per street jamb, two por double door frame hand.

Frames shall be phosphalized and racelya che cost of oakid-on prime paint.

"Single openings are designed to be pre-hung and installed. Units are supplied KO for pre-hanging at job site or by electibuter.

11989 By Steelera

THE SEC STATE OF THE SECOND



FINISH PAINTED AND WEDD BANH FINISHES

#### HARDWARE

Replacement Units shall be prepared for the following hardware:
Hinges: hardware:

Hinges:

1-1/2 pair of 4-1/2 4-1/2 ... 134 template hinger Lock and Strikes

Box or most 16% (ANSI-AT15.2) collection Box Box and ment 89 (AMSI-MALS t) mortiue look with an UMSI-Allign or 2 cirke

Consult distributor for other hard-responsible for

	NOMINAL BIZE	FRAME SIZE		NET DOOR SIZE	
		WIDTH	HEIGHT	WIDTH	HEIGHT
	2363	31"	79%"	30-13/15"	I -
	3068	35"		3-1-13/15"	Į
	3659	41"		40-13/* 6"	70%"
	3865	43"		42-13/16"	
7	4056	47"		46-13/15"	
SINGLE	2070	31"	£3%"	30-1 3/16"	
S)	3070	35"		34-13/16"	824"
	3570	4""		40-13/16"	
	3570	43"		42-12/16"	1
	4070	47"		45-13/18"	
	5463	ŏ3"	7914"	30-13/10" 31-13/16"	75%
PAIN	5000	747		34-13/16" ( 35-13/16"	1 44
ď,	5470	5 <b>3"</b>	83%"	30-13/16" 131-13/16"	82%"
	3070	71"		34-13/15" 4 35-13/16"	024

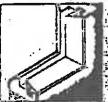
FOR PAIRS OF DOORS INACTIVE LEAF IS 1"WIDER THAN ACTIVE LEAF CORSULT DISTRIBUTOR FOR OTHER SIZES.

## DOOR DETAILS

1 4 4 - 90%



Full honeycomb core of phenolic realin-impregnated kroft. paper reinforcies the door every trinch, providing superra-tive registance to impact and assuring a first surface.



tanap-ini



8-gage thick hings reinforcement.





disco. nd:butts المراجع العرب



Door battam with gouble awarp when required. .

300



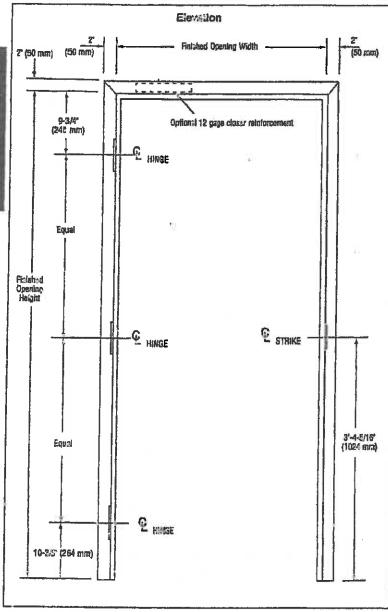
in vieted doors: une pound palystyrensy cure, 1% pound polyurathana cors when required.

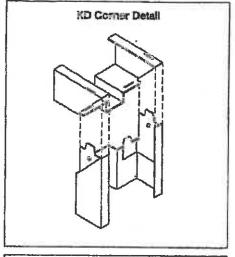
## PAIRS OF DOORS

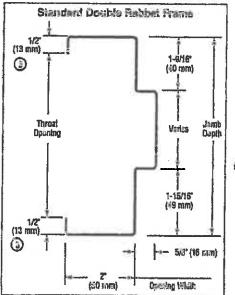


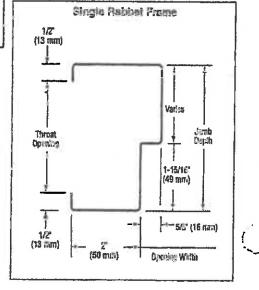
Dealgne arown may us combried for pairs of doors. Petra of done conset of two laws. and a 14 ga steet "Z" astrage I hatd mounted to inactive rest of pair, inactive no clod deat this borough with tash bolts or surface polls.

Note: For pairs of doors, right hand will be act ve. . Thus epositically ordered.









## CONSTRUCTION NOTES:

- 1. Door opening size merdinum: Single door opening size 5'0" x 11'0" (1524mm x 3355mm) Double door opening size 10'0" x 11'0" (3045mm × 3355mm)
- 2. Jamb depths (profile) availability: Single rabbet: minimum = 3" (75mm) mudmum = 129t" (324mm) Double rabbat: minimum = 4%" (121mm)

madraum = 14%" (375mm)

3. Standard profile dimensions (variations avallable):

Face = 2" (50mm)

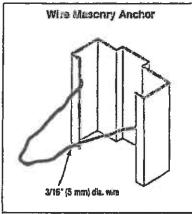
Stop = 5/1 (16mm)

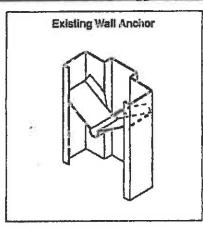
Returns = 1/2" (15mm) all frames avespt 5%" (146mm) which

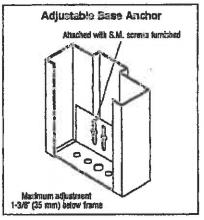
is 7/16" (11mm)

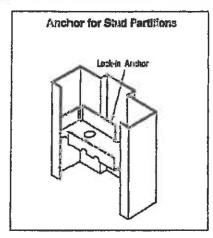
4. Standard dio-mitered corners: Four (4) concealed tabs interlocking head and jambs

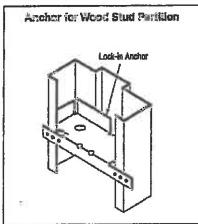
1 Political Print SPERTING SE

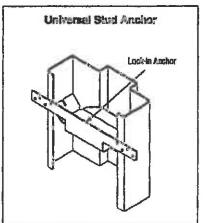










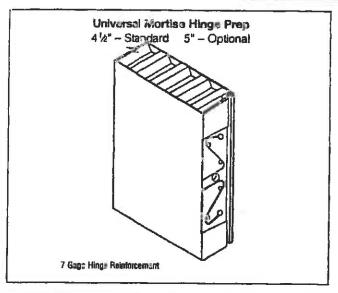


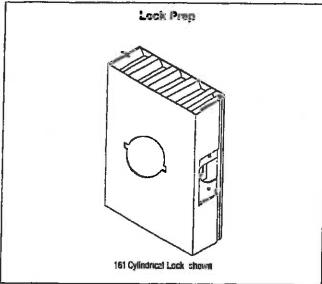
#### ANCHORING AND INSTALLATION NOTES:

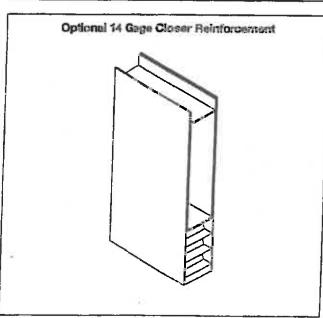
- 1. F16 and F14-Series Commercial and Incitational Frames are supplied standard with masonry wire or lock-in jemb anchors and adjustable base anchors. Anchors are designed for maximum wall/frame engagement and installation flexibility.
- 2. Anchoring applications:
  - Masteriny wall Masteriny wire anchors (%s" [5mm] dia.) provide maximum engagements in morter joints, and allow for full internal grouting during installation. Adjustable base anchors are allached directly to the floor and adjusted. The wall is built around the anchored frame. (Refer to instaliation sheet #INS-2004.)
  - Existing masonry walls (EMA) Specifically designed (18 Ga. steel) jemb anchors are used to add support for bolling the frame into the rough opening of an existing wall. An existing wall anchor is used as the base anchor in this application. (Fiefer to installation shout #INS-2014.)
  - · Wood stud walls Lock-in (18 Ga. steel) jamb anchors are designed to be attached to the wood stud rough opening. After the frame is anchored, the wallboard is installed and finished. (Refer to installation sheet 4/1N\$-2005.)
  - \*Stoct atted waits Lock-in (18 Ga. steel) jamb anchors are designed to be attached to the webbing of the closed steel

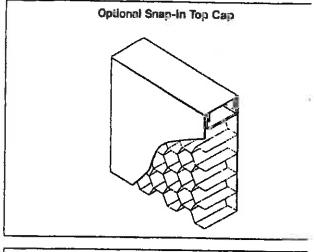
- studs which are built around the frame. Adjustable base anchors are attached directly to the floor and adjusted. After frame is anchored, the wallboard is installed and finished, (Refer to instaliation sheets #INS-2006 and 2007.)
- 3. Special frame anchorage: Frame anchorage details shown on this sheet are applicable to double rabbet frames with 2" (50mm) faces. Anchorage details and availability of lock-in anchors will vary with the following frame profile changes:
  - Single rebbet all details will vary.
  - Double rabbet over 834" (222mm) jamb depth
- 4. Installation coulton notice: When temperature conditions necessitate an additive to be used in the plaster or mortar to prevent freezing, the contractor installing the frames shall coat the inside of the frames in the field with a non-corrosive bituminous material.
- 5. Installation shall conform to the published Steelcraft installations instructions, SDI 105 Recommended Installation Instructions for Sigal Frames, and ANSI/DHI A115-IG installation Guide for Doors and Hardware.
- 6. All fire rated frames must be installed in accordance with MFFA Pamphlet 80 and the Authority Having Jurisdiction.

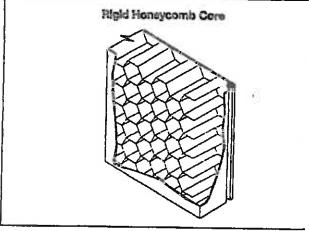
F1-4











#### GENERAL NOTES:

- 1. Edge construction:
  - Vertical edges (both hinge and lock) are beveled with a visible seam.
  - Top and bottom edges are closed with inverted 14 gage weighted channels. Exterior applications require the additio of snap-in top caps to protect against the weather.
- Optional edge seams available in the L-Series door construction are as follows:
  - LF The mechanical edge seam is filled and finished price to applying the factory primer.
  - LW The mechanical edge seam is welded and finished prior to applying the factory primer.
- Optional cores available in the L-Series door construction:
  - Polyatyrene for exterior applications in extreme weather conditions.
  - Polyurethane for exterior applications in arctic weather conditions. Not Fire Rated.
- Standard hardware preparations: standard mortised and reinforced for;
  - Universal hinge prepa 4½\*(114mm) patented preparation which allows easy and quick field conversion from standard to heavy weight hinges,
  - Locks A multitude of standard lock preps are available.
     The most commonly used with a 4½ (124mm) strike are 161, 61L and 86.

# STEELCRAFT.

## INSTALLATION:

- Installation shall conform to the published Steelcraft installation instructions, SDI 105 Recommended Installation Instructions for Steel Frames, and ANSI/DHI A115-IG Installation Guide for Doors and Hardware.
- Fire Rated Assemblies must be in accordance with NFPA Pamphlet 80. The Authority Having Jurisdiction is the final authority in issues related to the installation and use of installed Fire Rated Doors.

## DOOR EDGE APPLICATIONS:

The L-Series Doors are used in virtually all buildings and construction applications. The application and functionality dictate the door edge construction specified.

Edge	Usage	Application
L	Heavy & Extra-heavy duty	High traffic in all commercial applications
LF	Heavy & Extra-heavy duty	High traffic, in sanitation conditions
LW	Heavy & Extra-heavy duty	High traffic, in sanitation and high abuse conditions

## CONVERSION CHART

ANSI A250.8 (SDI 100) Recommended Specification for Standard Steel Doors and Frames.

3	Lever	Model	Description	Edge Construction
iries	1.0040	1	Full Flush	Full height, visible mechanical interlocked edge
1.18	2	<u> </u>		L-Series with epoxy filled edga seams
118	2	2	Seamless	F-Selles men about twen ende seeme
		2	Seamless	L-Series with welded adge seams
W18	4		Full Flusin	Full height, visible mechanical interiocked edge
16	3	1 1		in the same filled adopted milk
F16	3	2	Seamless	L-Sories with epoxy filled edge seams
		<del> </del>	Seamless	L-Series with welded edgs seams
₩16	3	2	Seamess	L CC1100 Time Time Time Time Time Time Time Time

## DOUBLE DOOR APPLICATIONS:

L-Series doors are available in double door elevations, with active and inactive leaves and an overlapping astragal.

- Standard operating clearances (installed in frame):
  - Head = ¼" (3mm) to bottom of head or transom panel
  - Hings side = 352" (2mm) to rabbot on jarnb
  - Meeting edges = ½2" (2mm) with or without astragal.
     For openings without an astragal, a wide inactive leaf is used.
  - Bottom = ¾" (19mm) to bottom of frame

Cara Manual

Normana Door Height

Normana Door Height

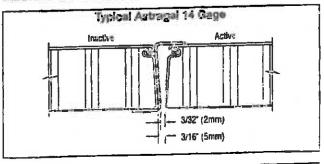
Normana Door Height

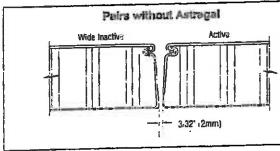
Normana Door Height

Sea meeting edgs datal/s

- Mesting edges;
  - 14 Gage astragal is furnished loose for installation in the field by others.
  - Overlapping astragal tits are available to convert an active leaf to an inactive leaf.
  - When an astragal is not used, the width of the inactive leaf is increased 3/2" (2mm).
- Hardware preparations: the inactive leaf can be prepared for hardware as specified.

## MEETING EDGE DETAILS:



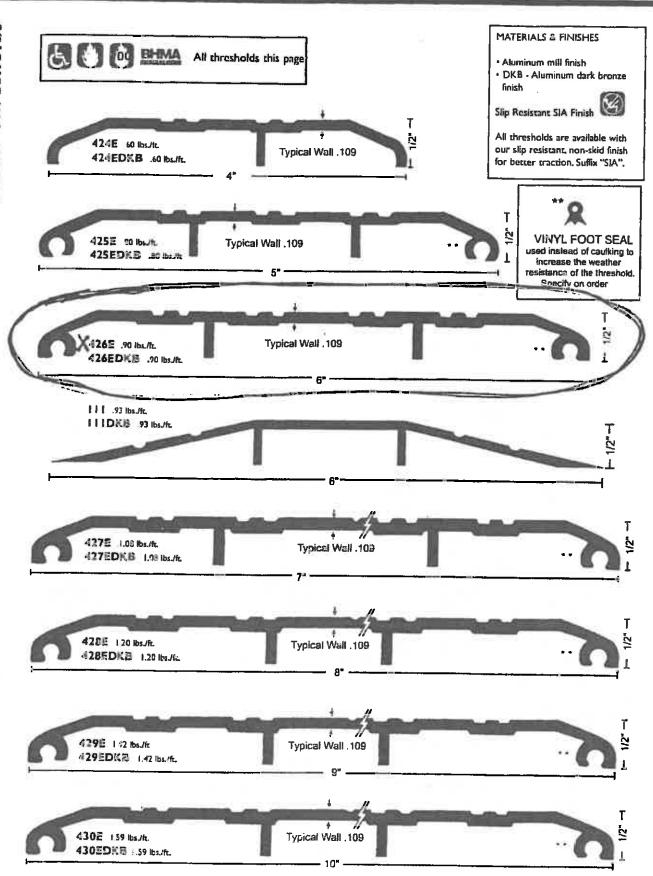


Phone: 809-647-7874

Fax: 800-255-7874

www.ngp.com





# Specifications

#### Handings

All D-Series lever locksets are non-handed.

#### Door Thickness:

11/8" to 21/6" (41mm-54mm) standard including VandIgard<sup>©</sup> functions.

See accessories (Page 12) for spacers required for 1.1/8" doors.

#### Backsets

2 1/4" (70 mm) standard. 23/8", 3 1/4" and 5" (60 mm, 95 mm, 127 mm) optional.

#### **Faceplates**

Brass, bronze or stainless steel. 11/2" x 21/4" (29 mm x 57mm) square corner, beveled.

#### Lock Chamin

Zinc plated for corrosion resistance.

#### Latch Bolts

Steel, ½" (12mm) throw, deadlocking on keyed and exterior functions. ¾" (19mm) throw anti-friction latch available for pairs of fire doors.

#### Exposed Trime

Levers: Pressure cast zinc, plated to match finish symbols. Roses: Solid brass.

#### Strikes

ANSI curved lip strike 11/4" x 47/4" x 11/16" lip to center standard. Optional strikes, lip lengths and ANSI strike box available. See page 11.

#### Cylinder & Keyar

6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.

#### Keying Options:

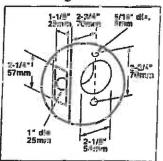
Interchangeable core and Primus<sup>®</sup> high security cylinders. Master keying, grand master keying and construction keying.

#### Wagranty

Seven-year limited for all functions including Vandlgard®.

## Door Preparation

#### Lever Designs



## Certifications

#### ANSE

Meets or exceeds A156.2 Series 4000, Grade 1 strength and operational requirements. Meets A117.1 Accessibility Code.

#### Federal

Meets FF-H-106C Series 161.

#### California State Reference Code

(Formerly Title 19, California State Fire Marshal Standard)
All levers with returns comply; levers return to within ½" of door face.

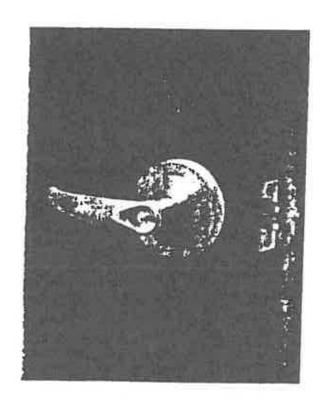
#### UL / cUL

All locks listed for A label single doors, 4' x 8'.

Letter F and UL symbol on latch front indicate listing.

Electrified functions are UL19X Listed for single point locking applications.

UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.



# D SERIES LEVERS

#### Functions

Non-Keyed Locks

SCHLAGE ANSI

ND10S F75

Passage Latch
Both levers always unlocked.



ND12D F88



Exit Lock
Outside lever always fixed. Inside lever always unlocked.

ND12DEL



Electrically Locked (Fail Safe)
Outside lever continuously locked
electrically. Unlocked by switch or power
failure. Auxiliary latch deadlocks
latchbolt when door is closed. Inside lever
always free for immediate exit.

ND12DEU



Secure)
Outside lever continuously locked until unlocked by electric current. Auxiliary latch deadlocks latchbolt when door is closed. Inside lever always free for immediate exit.

Electrically Unlocked (Fail

ND25D



Ewit Lock Blank place outside. Inside lever always unlocked.

ND40S F78



Bath/Bedroom Privacy Lock Push-button locking, Can be opened from outside with small screwdriver. Turning inside lever or closing door releases button.

ND445



Hospital Privacy Lock Push-button locking. Unlocked from outside by turning emergency turn-button. Turning inside lever or closing door releases button.

ND170



Single Duranny Trien
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Keyed Locks

SCHLAGE ANSI

ND50PD F82



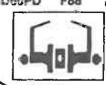
Entrance/Office Lock\*
Push-button locking. Push-button locks
outside lever until unlocked with key or
by turning inside lever.

ND53PD F109



Entrance Lock\*
Turn/push-button locking: pushing and turning button locks outside lever, requirir use of key until button is manually unlocked Push-button locking; pushing button locks outside lever until unlocked by key or by turning inside lever.

ND60PD F88



Vestibule/Classroom Security

Latch retracted by key from outside when outside lever is locked by key in inside leve Inside lever is always unlocked.

ND66PD F91



Store Lock\*† Key in either lever locks or unlocks both levers,

ND70PD F84



Classroom Luck\* Outside lever locked and unlocked by key. Inside lever always unlocked.

ND73PD F90



Corridor Lock.

Outside lever locked by key outside or push-button inside. Push-button released by rotating inside lever or cloring door. When outside lever is locked by key, key must be used to unlock it. Inside lever is always unlocked.

- Available functions for small format interchangeable core.
- † Causion: Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

## Designs & Finishes



#### **GEORGIAN**

Symbol: GEO Material: Wrought brass Finishes: 605, 606, 609, 610, 625, 626



**LEVON** 

Symbol: LEV Material: Pressure cast zinc lever; wrought brass or bronze rose Finishes: 605, 612,

Note: Levon available as

functions, Specify complete

trim application and door

handing when ordering with

inside trim only on deadlatch

613, 626



609



## OREIT

Symbol: ORB Material: Wrought brass or bronze Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 625, 626

613





#### **PLYMOUTH**

Symbol: PLY Material: Wrought brass, bronze, or stainless steel Finishes: 605, 606, 609, 610, 611, 612, 613, 616, 625, 626, 629, 630

**605** 

# deadlatch functions. Flaishea

805 Bright Brass

606 Satin Brass

609 Antique Brass

610 Bright Brass, Blackened

611 Bright Bronze

612 Satin Bronza

613 Oil Rubbed Bronze

615 Antique Bronza

625 Bright Chromium Plated

Satin Chromium Plated 625

629 Bright Stainless Steel

E30 Satin Stainless Steel

## TULIP

Symbol: TUL Material: Wrought brass Finishes: 605, 605, 609, 610, 625, 626



626

Keyed functions available with full size interchangeable core option for Orbit design.

#### **SECTION 07920 - JOINT SEALANTS**

#### PART I - GENERAL

#### 1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data.
- B. Warranty: Warranty materials and workmanship of sealing against leaks, adhesion, and cohesive failure for a period of two years from the date of substantial completion.
- C. References:
  - American Society for Testing and Materials
    - a) ASTM C790 Recommended practices for use of latex sealing compounds.
    - b) ASTN: C920 Elastomer Joint Sealanta.
  - 2. Federal Specifications
    - a) FS TT-S-00230C (2), Sealing Compound, Elastomeric Type, Single Component (for caulking, sealing and glazing in buildings and other structures).
    - FS TT-S-00227E (3), Sealing Compound, Elastomeric Type, Multi-component (for caulking, sealing and glazing in buildings and other structures).

#### PART 2 - PRODUCTS

#### 2.1 JOINT SEALANTS

- A. Compatibility: Provide joint scalants, joint filters, and other related materials that have been tested and found compatible with one another and with joint substrates under service and application conditions.
- Interior Scalant: Provide ASTM C 834. If no color is specified, use Gray. Location(s) of scalant for the following:
   Small voids between walls or partitions and adjacent door frames, and similar items.
  - Perimeter of frames at doors, windows, and access penels which adjoin exposed interior concrete and
    masonry surfaces.
- C. Enterior Sealant: Provide ASTM C 920, polyurethane or polysulfide, Type M, Grade NS, Class 25, Shore A hardness of 20-40. If no color is specified, use Gray. Location(s) of sealant for the following:
  - Joints and recesses formed where frames and vents adjoin masonry, concrete, or metal frames. Use scalant at both exterior and interior surfaces of exterior wall penetrations. Color to match adjacent surface.

#### 2.2 ACCESSORIES

- A. Primers: Provide a nonstaining, quick-drying type and consistency recommended by the scalant manufacturer for the particular application.
- Bond Breakers: Provide the type and consistency recommended by the sealant manufacturer to prevent adhesion of the sealant to backing or to bottom of the joint.
- C. Cleaning Solvents: Provide type(s) recommended by the scalant manufacturer, except for aluminum and bronze surfaces that will be in contact with scalant.

#### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Clean surfaces from dirt frost, moisture, grease, cil, wax, lacquer, paint, or other foreign matter that would tend to destroy or impair adhesion. Remove oil and grease with solvent. Surfaces must be wiped dry with clean cloths. When resealing an existing joint, remove existing calk or sealant prior to applying new sealant. For surface types not listed below, contact sealant manufacturer for specific recommendations.
  - Steel Surfaces: Remove loose mill scale by sandblasting or, if sandblasting is impractical or would damage finish work, scraping and wire brushing. Remove protective coatings by sandblasting or using a residue-free solvent.
  - 2. Aluminum or Bronze Surfaces: Remove temporary protective coatings from surfaces that will be in contact with sealant. When masking tape is used as a protective coating, remove tape and any residual adhesive just prior to sealant application. For removing protective coatings and final cleaning, use nonstaining solvents recommended by the manufacturer of the item(s) containing aluminum or bronze surfaces.
  - Concrete and Masonry Surfaces: Where surfaces have been treated with curing compounds, oil, or other such materials, remove materials by sandblasting or wire brushing. Laitance, remove efflorescence and loose mortar from the joint cavity.

# ATTACHMENT 7

Lead-Based Paint Inspection and Settled Dust Sampling Report For Hobart Armory

# Hobart Armory Lead and Asbestos Abatement Addenda #1 – Summary of Changes

- 1. All pipes with asbestos containing pipe wrap removed shall be re-insulated.
- 2. Sheetrock removed from Room #8 will not require replacement.
- 3. The drop ceiling that will be removed from Room #8 to allow for containment during the asbestos abatement process, shall be placed in Room 10 and will not require replacement.

# **Final Abatement Reports**

## LEAD & ASBESTOS ABATEMENT REPORT

#### FOR

## HOBART ARMORY

## KIOWA COUNTY, OKLAHOMA

## Prepared for

Oklahoma Department of Environmental Quality
Land Protection Division
Dustin Davidson
707 North Robinson
Oklahoma City, Oklahoma 73102

DCS Project No. 12234
Best Project No. ES-12-044
Site Contact: Dustin Davidson
Field Team Lead: Rick Williams

Prepared by

Basin Environmental and Safety Technologies
325 N Portland Ave
Oklahoma City, OK 73107
(405) 232-5737

September 14, 2012

## **EXECUTIVE SUMMARY**

This is the final report describing the Hobart Armory Asbestos & Lead Remediation performed for the Oklahoma Department of Environmental Quality (ODEQ) at the Hobart Armory located in Kiowa County, Hobart, Oklahoma. Basin Environmental and Safety Technologies (Basin) was contracted by the Land Protection Division of the Oklahoma Department of Environmental Quality (ODEQ) to conduct lead dust remediation activities at the former National Guard Armory in Hobart Oklahoma. This work was performed to provide for unrestricted, safe re-use of the storage areas, classrooms and offices at this facility. Abatement activities included extensive High Efficiency Particulate Air (HEPA) vacuuming, wet wiping, wet scraping, and encapsulation of leaded dust and lead based paint located within the armory. All abatement activities were followed by extensive post-abatement clearance dust sampling and analysis. Abatement and clearance activities took place from July 16, 2012 to August 24, 2012. All remediation processes were performed under the guidance of the ODEQ and in accordance with the Occupational Safety and Health Administration's (OSHA), 29 CFR 1926.62, "Lead in Construction Interim Final Standard" and the National Guard Bureau's "Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges."

Included in this closure report is a detailed summary of work, a copy of the post-remediation confirmation sampling, asbestos air monitoring clearance sampling, and site photos. All post-remediation confirmation clearance sampling was performed by Enercon Services, Inc. All post-sealant wipe sample results indicated and confirmed to meet the Environmental Protection Agency (EPA) and Department of Housing and Urban Development (HUD) standards for lead dust.

This final report was prepared by Basin under Verbal Tasking from Dustin Davidson. The ODEQ Site Contact was Dustin Davidson, and the Basin Team Leader was Rick Williams.

The ODEQ did not provide final approval of this report prior to the completion date of the work assignment. Therefore, Basin Environmental and Safety Technologies has submitted this report absent ODEQ's approval.
ODEQ has provided final approval of this report. Therefore, Basin Environmental and Safety Technologies have submitted this report with ODEQ approval.

Basin Environmental and Safety Technologies - Abatement Report for Lead Impacted Dust at Hobert Armory

## TABLE OF CONTENTS

	ection	Pago
EX	KECUTIVE SUMMARY	
1.	INTRODUCTION	
	1.1 REPORT FORMAT	1-2
2.	SITE BACKGROUND	»
	2.1 SITE LOCATION AND DESCRIPT	ION2-1
	2.2 BACKGROUND INFORMATION.	2-1
3.	ABATEMENT ACTIVITIES	
4.	CONFIRMATION AND CLEARANCE	SAMPLING 2-3

## ATTACHMENTS

Attachment A	Copy of Analytical Results for Dust
Attachment B	Copy Non Hazardous Waste Manifest
Attachment C	Copy Harzardous Waste Manifest
Attachment D	Site Photos
Attachment E	Site Floor Plan

## 1. INTRODUCTION

Basin Environmental and Safety Technologies (Basin) was contracted by ODEQ to provide asbestos abatement on approximately 270 linear feet of Thermo Systems Insulation (TSI), 800 square feet of drywall and joint compound, 430 square feet of category II floor tile and mastic, lead impacted dust, lead based paint and window & door replacement services at the Hobart Armory located at 217 North Lincoln Street, Kiowa County, Hobart Oklahoma. The abatement activity was initiated by ODEQ as part of the Site Cleanup Assistance Program (SCAP) and the Armory Cleanup Program. The EPA and ODEQ target clearance levels for lead in dust and the ODEQ clearance levels for IFRs were utilized for this project (See Attachment A for all analytical results). The clearance level for leaded dust on floors is 40 micrograms per square foot (ug/ft²). The clearance level for lead dust on floors, walls and ceilings in the IFR post-abatement is 200 ug/ft², post-lockdown treatment clearance levels for the IFR are 40 ug/ft². (See Attachment B for waste manifests).

All workers were trained, fit tested, and medically cleared to wear respirators in accordance with the 29 CFR 1910.134. Medical exams are performed annually under the supervision of a licensed physician.

Throughout the duration of the project, every change in work procedure was preceded by a tailgate safety meeting. Level C PPE (Tyvek Coveralls, Scott or 3M full-face respirator masks with appropriate P100 HEPA filters, and nitrile chemical resistant gloves) and Level D PPE were utilized throughout the project dependant upon the hazards assessment conducted on each process.

Lead dust abatement was accomplished with extensive HEPA vacuuming and Swiffer mopping.

Throughout Remediation the following engineering and administrative controls and waste stream management practices were followed:

- Poly sheeting was used as critical barriers on floors and entry ways to minimize cross contamination.
- Booties were worn by all personnel and changed entering and exiting clean areas.

- Project areas were delineated as dirty or clean dependant upon the processes and hazards present.
- Media collected from the IFR, HEPA Vacuums and appropriate cleaning materials was double bagged in 6 mil poly drum liners, labeled and placed in the stationed roll off box awaiting profile and disposal in an approved hazardous waste landfill.

#### 1.1 REPORT FORMAT

This report has been organized as follows:

- Section 1 Introduction
- Section 2 Site Background
- Section 3 Abatement Activities & Variance
- Section 4 Confirmation and Clearance Sampling

Basin Environmental and Safety Technologies - Abatement Report for Lead Impacted Dust and Soil at Hobart Armory

## 2. SITE BACKGROUND

Information regarding the site location, description, and history is included in this section.

#### 2.1 SITE LOCATION AND DESCRIPTION

The Hobart Armory site is located at 217 North Lincoln Street, Kiowa County, Hobart Oklahoma, The armory is a Brick and concrete constructed single story building with a concrete slab foundation and asphalt composite flat roof and metal dome roof. Several types of rooms are present within the building including offices, restrooms, & meeting rooms. The flooring of the facility is concrete. The facility was not being ventilated at the time of the abatement activity (See Attachment D for facility photos and Attachment E for a floor plan).

#### 2.2 BACKGROUND INFORMATION

This project is part of the ODEQ's SCAP & Armory Cleanup Program. This program remediates abandoned hazardous waste sites and closed armories throughout the state of Oklahoma.

#### 3. ABATEMENT ACTIVITIES

On July 16, 2012 Basin mobilized to the armory with a Lead Abatement Supervisor, Asbestos Abatement Supervisor and three (3) abatement personnel. Each employee was trained, made familiar with the statement of work and Environmental, Health, & Safety (EH&S) aspects of the project with emphasis on engineering controls, administrative controls, and personal protective equipment (PPE) to minimize employee exposure and cross-contamination. Basin workers began work in level C PPE, installing critical barriers and splash guards in prep for friable and non friable asbestos abatement. Workers then began manually removing carpet, floor tile and mastic in rooms 13, 14, and 17. A closed top roll off box from Basin Environmental was staged outside of the building on the east side near the bay door entry to the drill floor. It was then lined with reenforced poly preparing it for waste. Workers then finished prepping for the Department of Labor (DOL), regulated friable asbestos installing drop clothes, prepping with asbestos glove bags. Some of the drop down ceiling grids and panels had to be removed to access the asbestos piping. Basin hired a State of Oklahoma licensed electrician to verify all electrical had been deenergized in the building. DOL was contacted to conduct the required prep inspection and Enercon was called to conduct third party personal and area air monitoring. Friable asbestos was removed in accordance with (IAW) the Project Design and disposed in the lined closed box roll off. Asbestos abatement was completed at this armory July 24, 2012. Workers began wet scraping and locking down with DEQ approved elastomeric encapsulant all non-impact, non friction surfaces with LBP. The interior doors in rooms 1, 2, 6 and 20 were removed and wrapped in 6 mil poly and disposed of (IAW) the DEQ scope of work. The exterior door frames in rooms 1 and 2 was scraped down to metal. The frames were primered and painted. The LBP chips from this procedure were stored in UN open top drums until they were profiled and disposed of as Hazardous Waste. All the doors removed were then replaced by a third party installer meeting the vendor criteria for DCS and the ODEQ. Extensive HEPA vacuuming and swiffer mopping was conducted on floors of the entire building from August 1 to August 24, 2012 until demobilization.

# 4. CONFIRMATION AND CLEARANCE SAMPLING

The Oklahoma Department of Environmental Quality contracted Enercon Services Inc. as a third-party partner for clearance sampling. The results from these sampling events can be found in (Attachment A).

ATTACHMENT A

4



2039 Heritage Park Drive / Oldahoma City, OK 79120 / (405) 755-7272 / F≥x (405) 755-2058

# **Environmental Chemistry Analysis Report**

QuanTEM Set ID:

212067

Date Received:

08/30/12

Received By:

Sharrie Leftwich

Date Sampled:

Time Sampled:

Analyst:

BM

Date of Report:

8/30/2012

AIHA ID: 101352

Client

State of Oklahoma

DEQ Land Protection

Atm: Dustin Davidson

707 N. Robinson

Okluhoma City, OK 73102

Acet No.:

B486

Project:

Hobart Armory

Location:

Hobart Armory

Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
602	2	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W MIOSH 9100
003	3	Wipe	Lead	<16.0	16	ug/sq. Ft.	03/30/12 14:35	W NIOSH 9100
004	4	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
005	5	Wipe	Lead	<16,0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
006	6	Wipe	Lead	<16,0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
007	7	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
008	8	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
009	9	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	<b>W NIOSH 9100</b>
010	10	Wipe	Lesd	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
011	11	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
012	12	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
013	13	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
014	14	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
015	15	Wipe	Lead	31.2	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
016	16	Wipe	Lead	32.7	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
017	17	Wipe	Lead	<15.0	16	ug/sq. Ft.	0 <b>8/</b> 30/12 14:35	W NTOSH 9100

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified



2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

# **Environmental Chemistry Analysis Report**

QuanTEM Set ID:

212067

Date Received:

08/30/12

Received By:

Sherrie Leftwich

Date Sampled:

Time Sempled:

Analyst:

BM

Date of Reports

8/30/2012

AIHA ID: 101352

Client:

State of Oklahoma

DEO Land Protection

Attn: Dustin Davidson

707 N. Robinson

Oklahoma City, OK 73102

Acet. No.:

B486

Project:

Location:

Hobart Armory

Hobart Armory

Project No.: NA

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Data/Time Analyzed	Method
018	18	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
019	19	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
020	20	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
021	21	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
022	22	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
023	23	Wipe	Lead	26.9	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
024	24	Wipe	Lead	26.2	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100

Authorized Signature:

Benton Miller. Analyst

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, not does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) at EPA 600/R-93/200 Preparation Modified, EPA 7000B Analysis Modified

EPA Method 7032 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified



# LEAD CHAIN OF CUSTODY

	2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 a. (401) 755-7277 Ext. 1440 per pre-	Page 1 of
www.QuanTEM.com	LEGAL DOCUMENT - PLEASE PRINT SCIENCE	Lab No. 212 De 7
のでは、100mmには、		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Tenne 405 - 402 - 5 115 Part Barre 145 1 117	Report Besults (O) one bond.
Compact Descript Danie		CURNITH Website
K	į	Other
	Projectific	
POSTIN DOSTINO	_	
THE HIND DISH SOM	THE REPORT OF THE PROPERTY OF	の日本日本の日本学生の公司のでは、1987年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の
Out Vanh		
第一次のでは、100mmのでは、100	REQUESTED SERVICES (Please of the Abandorlan-Boyacti	
	h 4 .	nly Sample Matrix
The state of the s	2	<b>ح</b>
	ule	8 Paint Chips
1000 C 10	M W Ind	_
. 8	スリースンには、こ	D Bulk Miscellaneous
		E Air Cassette
1		
100		
lo.		
7		Ţ
·		
6		CONTRACTOR OF THE PARTY OF THE
10.		20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
		1
12		%-inak
		5-Day

1-2-1

SATUNDAY SAMPLE DELYCHY - CALL TO SCHEDALE \* Unothis address for Saturday Dalivery suby. 4220 M. Sente Feliable, Officials City, OK 73105-6517 \* Mark Package "Hold for Saturday Picture"

## Supplemental Report **QAQC** Results

QA ID: 10299 Test:

Lead

Date: 8/30/2012

Matrix: Wipe Lab Number:

212067

Benton Miller Approved By: Date Approved: 8/30/2012

Notes:

Blank Data:

Type of Elank	Blank Velse
FCB	0
ICB	0
Matrix Blank	0

### Standards Data:

Standard	Low Limit	Otenined	Eigh Limit
	1		
CCV	4.5	5.2	5.5
FCV	4.5	· 4.8	5.5
ICV	0.9	1	1.1
RLVS	0.256	0.289	0.384

### Duplicate Data:

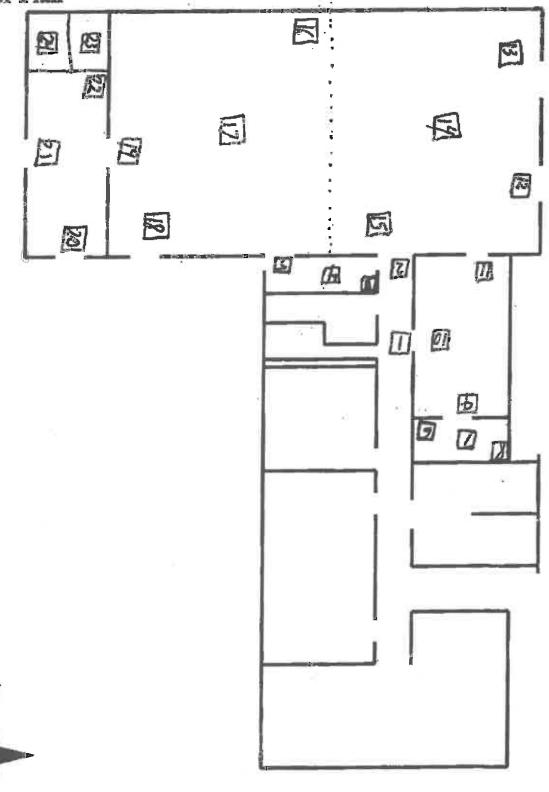
Recovery Data:

Sample Nember		Repult	Spike Level	Result + Spike	% Recovery	Dup. Rasult + Spike	% Dup. Recovery	% Spike RPD
MS-W2	-	0.000	5.230	4.832	92.4	4.872.	93.2	0.8
MS-WI		0.000	5.136;	5,528	107.6	5.556	108.2	0.5

Authorized Signature:

Benton Miller, Analyst

Hobart Armory - 1949 Floor Plan



Floor plan not drawn to scale

ATTACHMENT B

38720

## NON-HAZARDOUS SPECIAL WASTE'& ASBESTOS MANIFEST

No. 4.41 If waste is asbestos waste, complete Sections I, II, III and IV WASTE CONNECTIONS INC. If waste is NOT asbestos waste, complete only Sections I. II and III Corners to 4 hat Federal GENERATOR (Generales completes ell of Section I) Section I Generator Name b Generating Location Address Phone No If owner of the generating facility differs from the generator, provide g Cymer's Name h Owner's Phone No OM - METAL DRUM I. WCA WASTE CODE DP - PLASTIC DRUM BAG Containers TYPE 8 MIL PLASTIC BAG or WRAP TRUÇK OTHER GENERATIONS CERTIFICATION ! hereby carefy that the above named material or not a hazardous waste as defined by 40 CFP Part 261 or eny UNITS POUNDS state law, has been properly described, classified and packaged, and it in proper condition for transportation according to apwrate as treatment residue of a previously restricted transidous waste subject to the Land Disposal Fleshotons, I can have been treated in accordance with the requirements of 40 CFR Fast 298 and is no furger a hazardous waste as defined by m according to applicable regulations, ty and warfard that the w YARDS de as defined by 40 CFR Part 261 **CUBIC METERS CUBIC YARDS** OTHER nzed Ageni Neme Shapment Date or or investigated TRAHSPORTER (Generalist opmplets and Section B TRANSPORTER I TRANSPORTER TO Basin Environmental a Name h Name 3120 S. Meridian / ddress Address Oklahoma City, OK 73119 O Drive Name/Title Driver Name/Title d Phone No (405) 232-5737 k Phone No.:\_ Truck No ... Vehicle License No /State m Vehrcle License No /State Acknowledgment of Receipt of Materials Acknowledgment of Receipt of Materials 139 n Ditiver Signature Drive Signature Shipment Date DESTINATION (Generator completes and destination 5-to completes of) Section III Oklahoma City Landfill (405) 745-3002 a Site Name Phone No. d Mailing Address Cklahoma City Landilli D Physical Address 7600 SW 15th Stragt 7600 SW 15th Street Oklahoma City, OK 73128 Oklahoma City, OK 73128 e Discrepancy Indication Space. I nereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate W. Atak Name of Authorized Agent Signature Receiot Date Section IV ASBESTUS (Generality considered of the Ethiory corrections) a Shippers' Name . b Shipper's' Phone No. c Shipper's" Address \_ d Shipper's' Special Handling Instructions and additional information CERTIFICATION. I hereby declare that the contents of this consumment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

y 🔲 Fnable; 🔛 Non-friable, ☐ 3oth % fracile % nontingols "Shipper refers to the company which owns leases, oppraises controls or supervises the facility being demokshed or renovated, or the demokson or renovation or personal operation or both

e Shipper's' Name & Title

of Responsible Agency

Name and Address

b Shipper's\* Phone No ...

Date

ATTACEMENT C

788						2-	TE HIPE				- (	Order &	<b>80874</b>	
	print or typa. (F		ed for use or Generalor II	n elile (12-plici	) Spewiter,)	ز استان		-				ип Аррсони		208
Ш	HIFUNIS HAZA LEASTE MAMP	EST	OKP	D41918	2259 / G	0040		3. Emergency Au spa See Secti	on 14		001	9251		
11 8	Jikahoma Ch	pt of Emi /. OK 73:	101 101	Cualty, 7	97 N. Robbiss	an -, P.O.	Sax 1677	iemento's 815 Addie 715 N Linc Hobart, Oi	oin Silvest	than cualing act	deset .	1		
G2 8.1	asalah Pana Jangalai Can Jasin Envi	405-23 pany Name	2-5737	ATTN: Jes	Curry///	2 10	Pho: 4	3:-232-5737	166	UR ENT	Mireher			
7.7	Ransporter 2 Comp	Name Name					State			U.S. CPA (C	0(	20002	3085	
f	Mective E			nc.				DA: TX-871500	# <del>} # 1</del> 351		TXR	100005	1 508	
3.5 Re	S roles S on l obstaum. TX l dys Phane	Petronita i	Resid	. 800-	242-3200			, State ID#: 50	)352	U.S. EPAIG		089452	340	
12. 15.1	96. U.S. DOT L Strill Planting Co	Jecoripizan (i Naup (if azirji)	newding Prope		, Hassard Clase, 10	Number,		10. Conta		11. Total	12. Unit	12 W	festa Code	_
8	1. RQ, Haza	rdaue w	este, solid. ERG 171.	n.o.s. (C90	8. pokil difps	and dabr	is with Lep		Type		PAASI	¢1	J783	BH
5	2				-		3 "	001	DA	55	6		17.9	_
												,		
	3,		<del></del>											
	-													
	4.			-									7	_
14.61	4. Loud based	relate etal	distant into	mation ontermination	debris (P	F:09-007-	785K	Black	QENCY R	SPONSE PI	KONEE: 214	1-635-1(0)		
15. GE 370 En:	OMERATOR BOOFF	EROR'S ČE Istorijal, an	epare Amon es li cil es li	thordsy decision proper s	to first the contains	of this cond	grissent are full to represent a	y and acousticity of the Committees and nation	Ped above by	Court support	MOOR.			Ţ
15. GE Ma Eq I co	CHERATICS BIGHT Sad and labeled poster, I cardly that July That the world must prior Saltics	EROPO CE Istantol, an Astronomia Inhibitation	istance mon date in filter of this consign	thordsy decision proper s	to first the contains	of this cond	grissent are full to represent a	end economy by elect	Ped above by	Court support	MOOR.			
15. GE	QUERATICA BIOFF (Sad Sad labeledly police I certify that o'lly that the wests	EROR'S CE Control on anticipation of the control of the control of the control of	Section Committee in the condition of th	thorsty decision of the page o	to first the contains	of this comment of the comment of th	ground are (A) to represent a Administration althy generator) Statement	y and accuracy dead Considered and notice Mt of Consont. Or (b) (Fill om a small o	thed allowe by	Court support	MOOR.			
15. GE En les Lorente	OMERATOR SIGNED FOR STATE OF THE STATE OF TH	EROR'S CE Control of an inchestor Substitution of the control of t	in port to U.	t thorstoy decise pacts in proper a recent conform to child in 40 CF.	to first the contains	of this comment of the comment of th	grissent are full to represent a	y and acquest 2 by disco	thed above by a great transfer to the state of the state	Court support	MOOR.			
15. GE English Ice Control	overlay certify that and end tabelong poster, I cartify that are westerned to the control of the	ERCHE'S CE Licondo-1, an the contents a minimization Virgo Nea	is in it does not be a consignation of this consignation of the consistency of the consisten	to thousy decise pacts in proper surrent conform to the CR	to that the content production for transp of the Lewis of the i R 202.27(a) (/ Lan	of this comment of the comment of th	ground are (A) to represent a Administration althy generator) Statement	y and accurately disasternative and matter most consont.  To the fill arm a crush a process of the fill arm a crush a	Ded above by disposed and the second	Court support	MOOR.		Day	Yes
15. GET PROPERTY OF THE PROPER	OMERATION SIGNED FOR A SIGNED AND	ERORES CE Contoct, an file contents annic leader Vyrod No.	is in it does not be a consignation of this consignation of the consistency of the consisten	t thorstoy decise pacts in proper a recent conform to child in 40 CF.	to that the content production for transp of the Lewis of the i R 202.27(a) (/ Lan	of this comment of the comment of th	greent are Mit to represent the matter generated and street and st	y and approachly dead Commissed and notion Mt of Consont, or (b) (21 am a small a Post Clarity)	Ded above by disposed and the second	Court support	MOOR.		Day 1	Yes 2
15. GE Sup les Constitution A. Trough	DEFRATOR BIOFF Sad and labeled protect, I cardly that andly that are wasted protect from the con- ter all consults for a poster from the con- cy of the consults of a cy of the cy of the cy of a cy of the cy of the	ERCIR'S CE tronded, and the contents and all tronders and a contents are a conten	is in it does not be a consignation of this consignation of the consistency of the consisten	to thousy decise pacts in proper surrent conform to the CR	an flict the contains condition for transp of the Louise of the R 202.27(a) (if I am	of this comment of the comment of th	gracent are Mile opposite in Administration with passector) Service of them U.S. Signature	y and accurately disasternative and matter most consont.  To the fill arm a crush a process of the fill arm a crush a	Ded above by disposed and the second	Court support	MOOR.	nd and design	Coy (S)	Ye 2
15. GE Sup les Constitution A. Trough	DEFRATOR BOOFF and and believe the poster, i certify that are worted to the poster of	ERCIR'S CE tronded, and the contents and all tronders and a contents are a conten	is in it does not be a consignation of this consignation of the consistency of the consisten	to thorstoy decise packs in proper commend and for the confirms in the conf	an flict the contains condition for transp of the Louise of the R 202.27(a) (if I am	s of this comp out according that od EPA a a large spea	greent are Miller applicable in Adaptive to Adaptive t	y and accusately dead considered and matter and Consont. or (b) (31 am a crush a Post Clarify) Ento Institut	thed above by disposed and the second	Court support	MOOR Shiptons	and and disease the sent and d	Coy (S)	Yes 2
15. GE English	DEFRATOR BIOFF Sad and labeled protect, I cardly that andly that are wasted protect from the con- ter all consults for a poster from the con- cy of the consults of a cy of the cy of the cy of a cy of the cy of the	ERCIR'S CE L'ORDO, an file contents anthicises only rent of Resc Name Name	Jerus Andre de la sala	to thorstoy decise packs in proper commend and for the confirms in the conf	to that the containing market the containing the containing of the	s of this comp out according that od EPA a a large spea	greent are Miller applicable in Adaptive to Adaptive t	y find accuracy of the commitment and mailled the Consonius or (b) (if I om a small a mailled to be provided to	thed allowe by	of the proper ship of the proper ship of territories. If	MOOR states a state of the stat	and and classes in the control of th	Day Chay	Yes 2
15. GE English Control of the Contro	DEFRATOR BIOFF SAN AND AND AND AND AND AND AND AND AND A	ERCIRES CE Lacraded, and file contents anticipation apparas only: apparas only: apparas only: apparas only: apparas only: apparas only: apparas only: apparas only:	Jergand Amond days in 19 may not this condig in a feature of this condig in a feature of the import to U.  Jeography of Metallale  Output  Out	to thorstoy decise packs in proper commend and for the confirms in the conf	to that the containing market the containing the containing of the	s of this comp out according that od EPA a a large spea	greent are Miller applicable in Adaptive to Adaptive t	y and accusately dead considered and matter and Consont. or (b) (31 am a crush a Post Clarify) Ento Institut	thed allowe by	Registration Registration	MOOR states a state of the stat	and and classes in the control of th	Day Chay	Yes 2
15. GE English Control of the Contro	DEFRATOR BIOFF Sad and labeled porter, Leadily that the work of the control of th	ERCIRES CE Lacraded, and file contents anticipation apparas only: apparas only: apparas only: apparas only: apparas only: apparas only: apparas only: apparas only:	Jergand Amond days in 19 may not this condig in a feature of this condig in a feature of the import to U.  Jeography of Metallale  Output  Out	to thorstoy decise packs in proper commend and for the confirms in the conf	to that the containing market the containing the containing of the	s of this comp out according that od EPA a a large spea	greent are Miller applicable in Adaptive to Adaptive t	y and accuracy of the Committee of Indian Med Consoling of the Consoling o	thed above by the country goes	Registration Registration	MOOR states a state of the stat	and and classes in the control of th	Day  Day	Yes 2
15. GE MARIE DE LA COMPANIA DEL COMPANIA DEL COMPANIA DE LA COMPANIA DE LA COMPANIA DE LA COMPANIA DEL COMP	DEFRATOR BROFF Sad and babe stip porter, i certify that the waste of the same state of the same state of the sad and s	ERORY CE CONTROL OF THE CONTROL OF T	PRINCE ATTOM  Care in 19 rea  of this condig  a stellament in  Impact to U.  Control  Outsidy  Outsidy	thouse decisions to the control of t	to that the containing market the containing the containing of the	s of this comp and econoling situated EPA a large eco	gracont are M/I to approache in Administration and Administration after generator)  State of the Community generator and the Community generat	r find accurately offices formulated and mallen and of Consont. or (b) (21 cm at amult a  Post classing to the consont to the classing to the consont and as findersones start  The state of the consont and as the consont and as findersones start  The state of the consont and as t	thed above by the country goes	Partial Republicant	MOOR states a state of the stat	rid and classification of the control of the contro	Day  Day	Yes 2
15. GE man Exp Control of the Contro	DEFRATOR BIOFF SAN AND AND AND AND AND AND AND AND AND A	ERORY CE LOCAL A  It contents  A min feator  Apparis only;  Tract of Reac  Name  Space  [Sty (or Gon  Konegement	Section And March 19 19 19 19 19 19 19 19 19 19 19 19 19	though decise pade in proper process in proper process in proper process in the continue in th	be that the contains contains the transport of the transp	s of this compart opposition of the compart of the compart opposition opposition of the compart opposition oppos	gracont are M/lo approache in Adaptive library generator) Section U.S. Signature  Signature  Signature  1. In the section of t	r find accurate by officer formalisms and maller and of Consont, or (b) (31 cm at amust a  Post of amust been bossing.)	thed above by the country goes	Partial Republicant	MOOR states a state of the stat	rid and classification of the control of the contro	Day  Day	Yes 2
15. GE man Exp Control of the Contro	DEFRATOR BIOFF SAN AND AND AND AND AND AND AND AND AND A	ERORY CE LOCAL A  It contents  A min feator  Apparis only;  Tract of Reac  Name  Space  [Sty (or Gon  Konegement	Section And March 19 19 19 19 19 19 19 19 19 19 19 19 19	though decise pade in proper process in proper process in proper process in the continue in th	be that the contains contains the transport of the transp	s of this compart opposition of the compart of the compart opposition opposition of the compart opposition oppos	gracont are M/lo approache in Adaptive library generator) Section U.S. Signature  Signature  Signature  1. In the section of t	r find accurately offices formulated and mallen and of Consont. or (b) (21 cm at amult a  Post classing to the consont to the classing to the consont and as findersones start  The state of the consont and as the consont and as findersones start  The state of the consont and as t	thed above by the country goes	Partial Republicant	MOOR states a state of the stat	red and classes in the second of the second	Day  Day	Yes 2

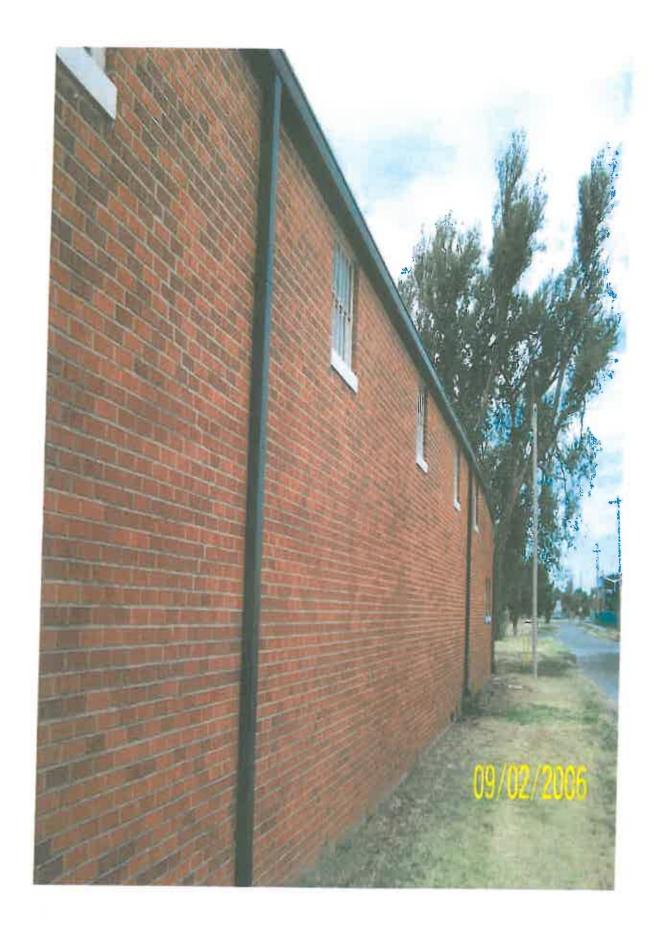
ATTACHMENT D



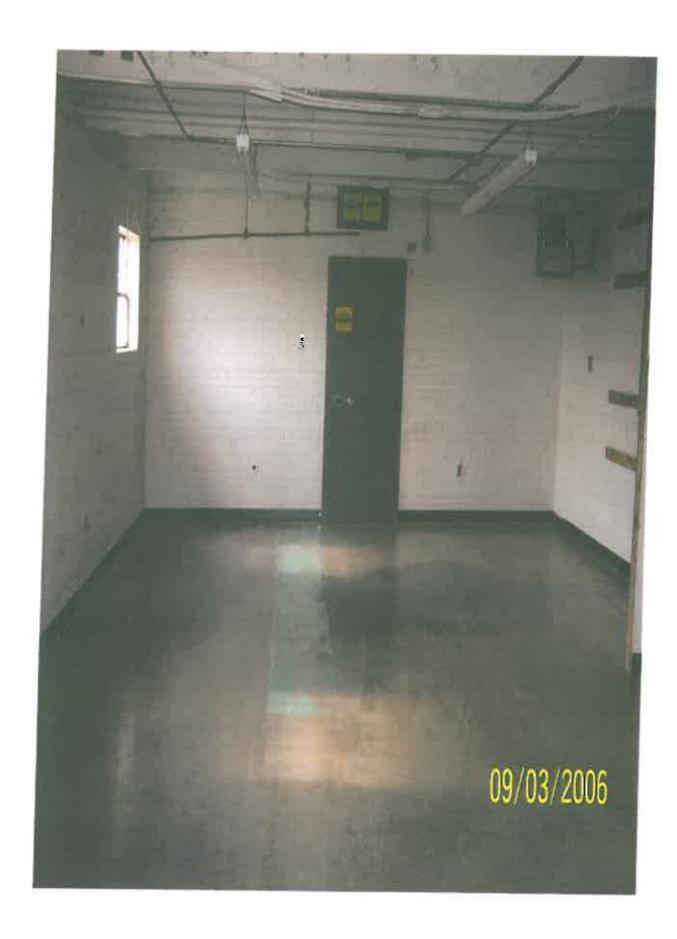




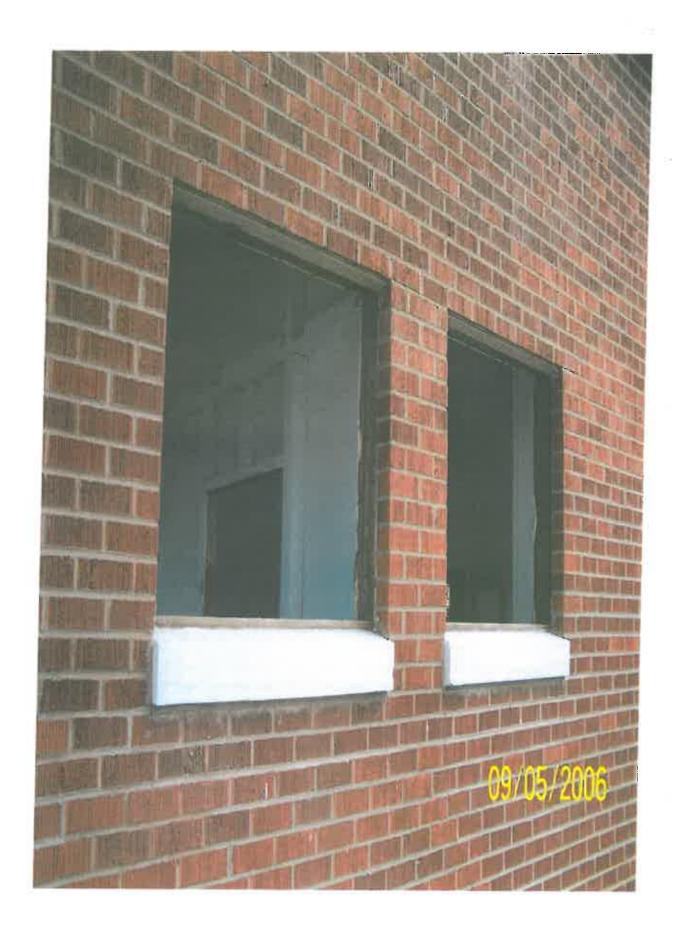






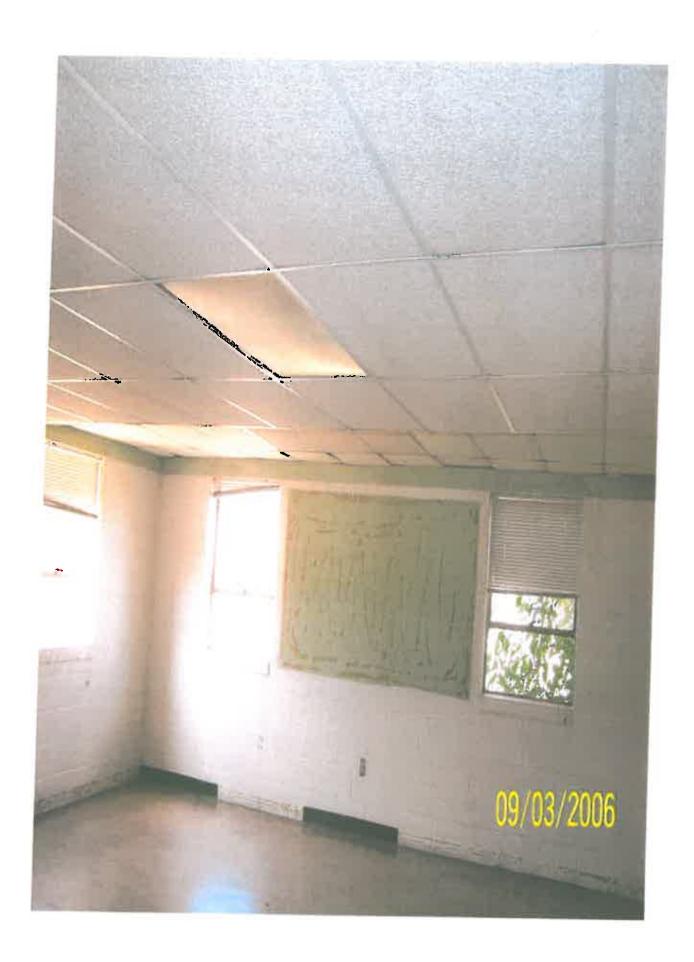






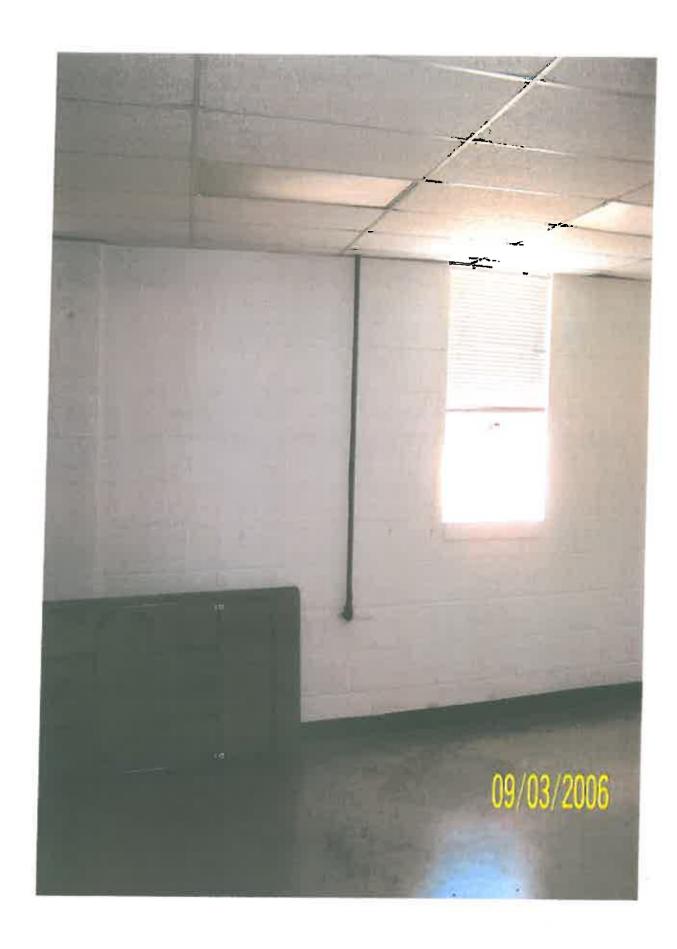


ì













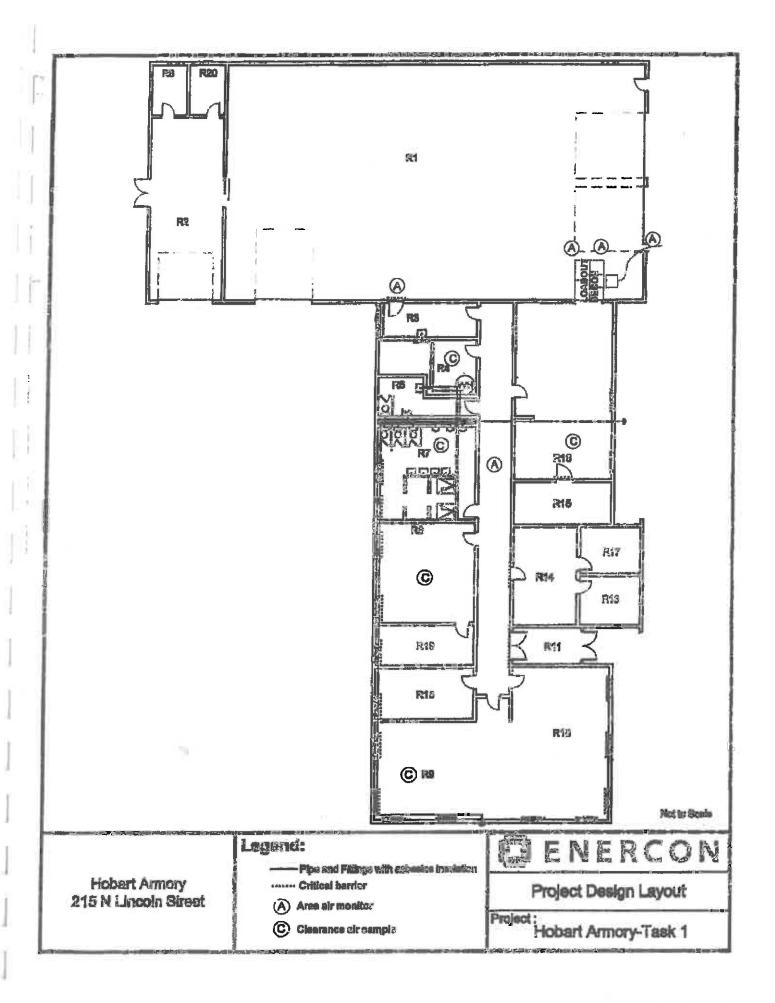








ATTACHMENT E



# **Confirmation Sampling**

### **CONFIRMATION SAMPLING RESULTS**

The Department of Environmental Quality (DEQ) personnel sampled the Hobart Armory for lead dust to confirm room floors were below the Housing and Urban Development (HUD) standard of 40 micrograms per square foot ( $\mu g/ft^2$ ) for child occupied facilities after all lead-based paint and lead dust abatement was complete. Below is a summary of the sample event and results.

On August 29, 2012, DEQ personnel sampled the floors of the building where lead-based paint abatement was completed and where lead dust was elevated before abatement was performed. Below is a summary of the results. Sample results are attached (Attachment 1).

o All samples were below 40 μg/ft<sup>2</sup>

# **ATTACHMENT 1**

# **AUGUST 29, 2012 SAMPLE RESULTS**



2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

# Environmental Chemistry Analysis Report

QuanTEM Set ID:

212067

Date Received:

08/30/12

Received By:

Sherrie Leftwich

Date Sampled:

Time Sampled:

Analyst:

BM

Date of Report:

8/30/2012

AIHA ID: 101352

Client:

State of Oklahoma

DEQ Land Protection

Attn: Dustin Davidson

707 N. Robinson

Oklahoma City, OK 73102

Acct. No.:

B486

Project:

Hobart Armory

Location:

Hobart Armory

Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
002	2	Wipe	Lead	<b>≤</b> 16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
003	3	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
004	4	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
005	5	Wipe	Lead	<16.0	16	ug sq. Ft.	08/30/12 14:35	W NIOSH 9100
006	6	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
007	7	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
800	8	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
009	9	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
010	10	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
011	11	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
012	12	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
013	13	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
014	14	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
015	15	Wipe	Lead	31.2	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
016	16	Wipe	Lead	32.7	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
017	17	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified



2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

# Environmental Chemistry Analysis Report

QuanTEM Set ID:

212067

Date Received:

08/30/12

Received By:

Sherrie Leftwich

Date Sampled:

Time Sampled:

Analyst:

BM

24

Wipe

Lead

Date of Report:

8/30/2012

AIHA ID: 101352

024

Client:

State of Oklahoma

**DEQ Land Protection** 

Attn: Dustin Davidson

707 N. Robinson

Oklahoma City, OK 73102

Acct. No.:

B486

Project:

Hobart Armory

Location:

Hobart Armory

Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
018	18	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
019	19	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
020	20	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
021	21	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
022	22	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100
023	23	Wipe	Lead	26.9	16	ug/sq. Ft.	08/30/12 14:35	W NIOSH 9100

26.2

Authorized Signature:

16

でのグ

ug/sq. Ft. 08/30/12 14:35

Benton Miller, Analyst

**W NIOSH 9100** 

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

# Supplemental Report **QAQC** Results

QA ID: Test:

10299

Lead

Date:

Matrix:

8/30/2012

Wipe

Lab Number:

212067

Approved By: Date Approved: 8/30/2012

Benton Miller

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

### Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5.2	5.5
FCV	4.5	4.8	5.5
ICV	0.9	1	1,1
RLVS	0.256	0.289	0.384

### **Duplicate Data:**

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result +   Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5,230	4.832	92.4	4.872	93.2	0.8
MS-W1	0.000	5.136	5.528	107.6	5.556	108.2	0.5

Authorized Signature:

Benton Miller, Analyst

-	¥	<b>&amp;</b> )	
1000,000		ORATORIES	mo:
41000000		LABOR	www.OuanTEM.com
Ŷ	4		V.Ou

# LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

For Lab Use Only

Lab No. 212. D67

Page 1 of

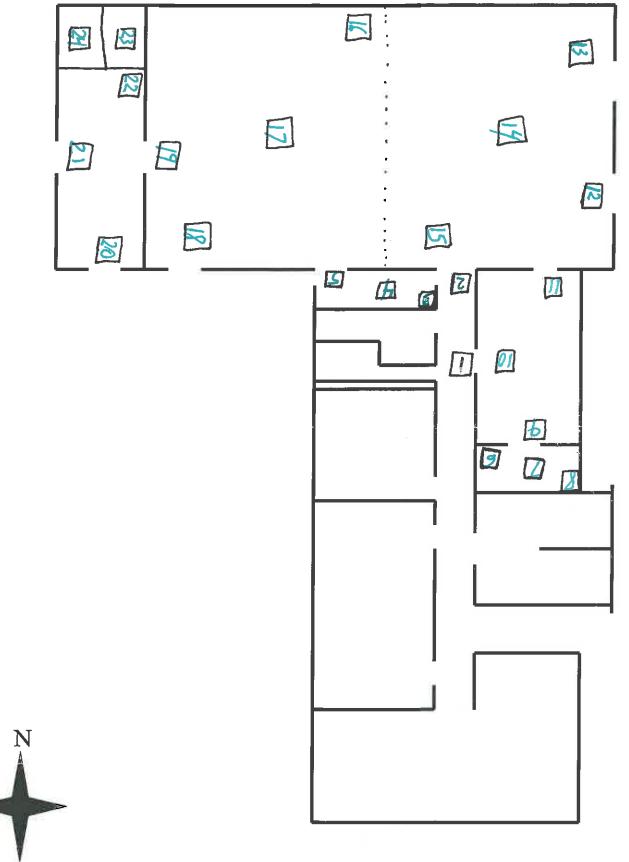
/55-2058	LEGIBLY
(edu) 642-1950 • (405)/55-/2/2 • Fax: (405)/55-2058	DOCUMENT - PLEASE PRINT LEGIBLY
7/7/-55/ (6	NT - PLEA
(40) (40)	DOCUME
-779 (nno)	LEGAL DO

				Accept Reject
Contact Information			Project Information	Report Results (V one hox)
Company: DE Q	Phone: 405 - 702 - 5115   Project Name:		tobart Armori.	QuanTEM Website
contact Dustin Davidson	Cell Phone: 3/7-4292	- :	J .	Other
Account #:	E-mail: 205 tin Jand See Project 1D:	Sea Project ID:		
Sampled By Name: Dustin David So	7 2	Date: 8/29/12	-	12
RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Dut Vanh	8/30/12 11:554m		4 Mulle	8/30/17 11:55
	REQUESTED SERVICES (Please 2 the Appropriate Boxes)	(Please V the Ag	propriate Boxes)	
				1 1

					LIX (xod)	Analysis	ysis	Units	Units (☑ ONE box only)	IE box	only)		Sample Matrix
No.		Sample Description	Volume	Volume Area	ΙδΜ				,		2		.
	(10 Characters Max)		(Liters)	(Length x Width)	əlc	-						≪	Soil
ř					line	C		% 1 Wa	/ 6	ا /لِد	u / f	Ω	Paint Chips
					S	Įd į		_	-			Ų	Surface / Dust Wipes
-	177			12/X/2/	J	X				X	 		Bulk Miscellaneous
7	0										-	Ш	+-
W	Q		}						-		-	<u> </u> 	
4	135					1	-					T	
70							-					-	
φ							-				-	1 .	
									<u> </u> -		+	-	
8	4	1,2 % - Balconnormal control of the		And the state of t	_								TURNAROUND TIME
6						_	-				<u> </u>		Same Day
10													× 24 - Hour
=												\	3 - Day
12	•								-	arm a soul brant		<u>                                     </u>	5 - Day

SATURDAY SAMPLE DELIVERY - CALL TO SCHEDULE \* Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave, Oklahoma City, OK 73105-8517 \* Mark Package "Hold for Saturday Pickup"

Hobart Armory - 1949 Floor Plan



Floor plan not drawn to scale